



Final Report

Graduation with Resilience to Achieve Sustainable Development (GRAD)

Intermediate Results Assessment 2016

*By
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Acronyms

ASE	Agri-Service Ethiopia
CRS/MCS	Catholic Relief Service/Meki Catholic Secretariat
CSO	Civil Society Organization
DA	Development Agent
FEMA	Farmers Economic and Marketing Association
FGD	Focus Group Discussion
FHH	Female Headed Household
FtF	Feed the Future
FY	Fiscal Year
GPS	Green Professional Services
GRAD	Graduation with Resilience to Achieve Sustainable Development
HH	Household
HHs	Households
HTPs	Harmful Traditional Practices
IGA	Income Generating Activities
IPs	Implementing Partners
IPTT	Indicator Performance Tracking Table
IR	Intermediate Result
KII	Key Informant Interview
M&E	Monitoring and Evaluation
MAD	Minimum Acceptable Diet
MFI	Microfinance Institution
MHH	Male Headed Household
MMF	Minimum Meal Frequency
MSP	Multi-Stakeholder Platform
NGO	Non-Governmental Organization
OFSP	Orange Fleshed Sweet Potato
ORDA	Organization for Rehabilitation and Development in Amhara
ORS	Oral Rehydration Solution
PPS	Probability Proportional to Size
PSNP	Productive Safety Net Program
REST	Relief Society of Tigray
RuSACCO	Rural Saving and Credit Cooperative
SNNPR	Southern Nations, Nationalities, and Peoples' Region
SNV	The Netherlands Development Organization
USAID	United State Agency for International Development
VCs	Value chains
VESA	Village Economic and Saving Association

Executive Summary

The basic tenet of Graduation with Resilience to Achieve Sustainable Development (GRAD) project is to significantly contribute to the efforts of sustained food security of chronically and transitory food insecure households in rural Ethiopia. GRAD seeks to graduate at least 50,000 chronically food insecure households (HHs) from the government's Productive Safety Net Programme (PSNP) in 16 targeted woredas through an increased HH's income of at least \$365 per year. The project aims to achieve its objective through three interrelated results: enhance livelihood options of chronically food insecure households in highland areas, improve community and household resilience, and strengthen enabling environment to promote scale-up and sustainability.

Under the auspices of CARE Ethiopia, GRAD is implemented by a consortium of partners. These are Agri-Service Ethiopia (ASE), Catholic Relief Service (CRS/MCS), Organization for Rehabilitation and Development in Amhara (ORDA) and Relief Society of Tigray (REST). The Netherlands Development Organization (SNV) joins as a technical adviser for value chain development and demand driven extension services.

Part of GRAD's monitoring and evaluation requirement as indicated in the Indicator Performance Tracking Table (IPTT) of the project document is to conduct annual intermediate results (IR) assessment to track change at the outcome level. Therefore, a fourth round of GRAD's IR assessment was conducted in 2016.

The major objective of this assessment was to measure current status of outcome indicators of the project and to assess how the benefits of the project were distributed between female headed households (FHH) and male headed households (MHH). Specifically, the study assessed intermediate result achievements for Results 1 and 2 of the project, based on a list of indicators used in the previous Intermediate Result (IR) assessments and other supplementary indicators provided by CARE Ethiopia.

The current IR assessment was largely based on quantitative data captured from GRAD HHs. However, sufficient qualitative data were also collected on various aspects of the project through focus group discussions (FGD) with beneficiaries and key informant interviews (KII) with stakeholders, mainly representatives of financial institutions across all IPs. In the current IR household survey, a total of 815 HHs were sampled and interviewed across all IPs. From the total surveyed HHs, 120 (14.7%) were selected from CARE's operational areas, 122 (15%) from CRS/MCS, 273 (33.3%) from REST, 211 (25.9%) from ORDA, and 89(10.9%) from ASE. Out of the total 815 HHs, 320 (39.3 %) were female headed households (FHH) and 495

(60.7%) were male headed households (MHH). The number of HHs with children under 24 months constituted 291 (35.7%) of the total assessment participants.

Summary of major achievements of the project under two main results and associated intermediate results and indicators are presented below.

Result 1: Enhanced Livelihood Options of Chronically Food Insecure Households

IR 1.1 - On and off-farm economic opportunities, inclusive value chains, and market access for target HHs stimulated

New Economic Opportunities

- The vast majority (above 90%) of HHs reported they were engaged in at least one income generating activity (IGA)
- 80% of HHs reported engaging in at least one value chain (VC) activity
- Poultry production was the most common type of economic activity adopted by those HHs involved in IGAs. It was adopted by 70.4% of the HHs, followed by petty trade (55.3%), livestock rearing (48.6 %) and vegetable production (44.7%).
- Shoat fattening was found to be the most common value chain adopted by GRAD HHs in all operational areas. About 59% of HHs engaged in VC have adopted shoat fattening. In intervention areas where malt barley and red bean were promoted, about 59% and 65% of HHs have been engaged in production of malt barley and red bean, respectively.

Main Source of Finance for VC Engagement

- Micro finance institutions (MFIs) were reported to be the leading source of finance for HHs engaged in VCs primarily such VC as cattle fattening (71.7%), shoat fattening (68.3%), red bean production (58.6%), and red pepper production (58.6%). VESA has also played a significant role in serving as source of finance for HHs engagement in VC activities.
- HHs engaged in VCs have utilized agricultural inputs and improved technologies. HHs engaged in production of pulses (89.2%) reported increased use of improved seed varieties, followed by red pepper (60.7%), potato (47.2%), malt barley (38.1%), onion (32.1%), and tomato (10.2%). Most HHs engaged in vegetable production have practiced improved agricultural practices such as row planting and irrigation. 94.6% of the HHs engaged in red pepper production reported the practice of row planting, adopted to a lesser extent by potato, onion, malt barley, and tomato producers.

Income Earned from IGA and VC Engagement:

- GRAD HHs earned an average net income of ETB 7,894 (or \$362) from their engagement in both IGA and VC activities in the last 12 months. However, the average net income earned by MHH (ETB 9,133) exceeded the ETB 5,975 earned by FHH in the same period.

- 36% of GRAD HHs earned \$365 or more from their new VC and IGA engagement in the last 12 months.

IR 1.2: Access to a range of financial products and services expanded

- 96.9% of GRAD HHs are members of a VESA. 53.4% and 6.9% of the HHs reported they have an account with an MFI and bank respectively. Similarly, 27.2% and 7.5% of the HHs reported membership in a RuSACCO and cooperative union respectively.
- MFIs and VESA are two main loan providers of GRAD HHs although some HHs accessed loan services from a RuSACCO. 91.3% of those HHs that had an account with MFI have taken loan whereas 72.9% of those HHs having membership in VESA have taken loan from their respective VESA. About 40% out of those HHs reported they were members of a RuSACCO and took a loan from their RuSACCO.
- Highest number of loans were taken from VESAs than other financial institutions. On average, GRAD HHs took loans from VESAs about 50% more often than from MFIs. However, MFIs provided the largest amount of loans, about 7,344 ETB on average. The second largest source of loans was RuSACCOs, which lent about 6,007 ETB on average.
- A majority (81.7%) of HHs have prepared a business plan to take loan from one of the three loan providers. Performance in utilization of loan for intended purpose and repay the loan on time was considerable. Of those HHs that took a loan from VESA, RuSACCO and MFI, 96.7%, 97.7% and 91% respectively, have repaid their loans as per the repayment schedule stated in their loan agreement.

IR 1.3: Extension Services Upgraded

- 66% of HHs reported that they have obtained market information before taking their products to market. Development agents stationed in kebeles were reported to be leading source of market information of the HHs.
- About 80% of GRAD HHs engaged in VC have been provided with training on their specific VC. Moreover, most of them indicated that they have obtained technical assistance and extension services from various sources such as DAs, model farmers, agro-dealers, GRAD frontline staff, and animators/facilitators. In this regard, 82% of the HHs mentioned that they got such services from DAs. GRAD project frontline staff were the second most frequently reported source of technical and extension services.

Result 2: Improved Household and Community Resilience

IR 2.1: Women resilience and access to inputs, services, and information increased

The study assessed gender equality and women's empowerment in terms of women's decision-making power in household affairs, access to inputs, market and information and leadership and division of labor in HH level and change in occurrence of gender-based violence and harmful traditional practices against women.

- The assessment found that considerable improvement was shown in women's access to agricultural inputs, market information, and market outlets. Large proportions of women have access to resources such as agricultural production inputs (91.1%), market information (81.4%), and market outlets to sell their products (86.7%).
- It is also learned that women role in decision making on various household issues was significant. In the majority (about 90%) of MHHs, wives and husbands made decisions over different household issues jointly.
- 23.9% of women in the GRAD households have held (or currently hold) one of four main leadership positions of VESA i.e., chairperson, secretary, cashier, or treasurer. Compared to women from MHH (16.4%), women from FHH (35.6%) had relatively more access to the leadership positions.
- Majority of women (61.4%) in GRAD households reported that the amount of time they spent for rest, social and/or leisure activities has increased over the past year. Comparatively, women in MHH (64.4%) had more rest and leisure time than those in FHH (57%).
- Change in the occurrence of gender-based violence and harmful traditional practices against girls and women over three years was assessed. It was found that the vast majority (above 95%) of both wives and husbands perceived that gender based violence like physical or verbal abuse against women by men have decreased over the last three years. Similarly, equal proportion of both wives and husbands witnessed the decrease in the practice of female genital mutilation (FGM) and early marriage for the last three years.

IR 2.2: Nutritional status of infants, children and reproductive age women improved

- Of the total sampled HHs, 35.7% (291 cases) reported having a child under age of 24 months. Of the total 291 children, 102 are reported to be at the age of 5 months and below.
- The vast majority (93.8%) of sampled children were provided with colostrum. Almost all (97.3%) of the mothers reported that they breastfed their children born in the last 24 months. Moreover, of those mothers who breastfed their children, 79% reported they first breastfed their child within an hour after the birth.

- The survey assessed the feeding practice of children using two common measures namely, Minimum Meal Frequency (MMF) and Minimum Dietary Diversity (MDD). Accordingly, it was learned that 78.3% of the sampled children (6-23 months old) have achieved the required minimum meal frequency per day. The MDD has been achieved by 67.2% of the children with the age of 6–23 months.

IR 2.3: Climate change adaptation improved

- A majority (77.9%) of respondents perceived that climate change is occurring in their locality. Change in rainfall amount, increase in temperature, and variability in rainfall are most common climate change manifestation events reported by the respondents.
- Three common adaptation measures taken by HHs were to start or increase saving (64.2%), use short-season or drought resistant crops (55.6%), and practice different watershed improvement activities (45.4%).
- It was learned that the vast majority of the HHs have adopted the climate adaptation strategies as a result of GRAD. For instance, of those HHs reporting that they have started or increased savings to respond to the climate change, 91.2% indicated it was as a result of GRAD. In the same way, 81% of those HHs involved in use of short-season or drought resistant crops have adopted this mechanism as a result of the project.

IR 2.4: Promote aspiration for graduation among targeted PSNP HHs and enhance enablers' graduation

- Currently 38.2% of GRAD HHs are in PSNP. Of these HHs, about 21% aspire to graduate from the PSNP within a year; 27% aim to graduate in the next two years whereas 29% hope to graduate between the next two to five years.
- From 61.8% of GRAD HHs that are not currently in PSNP, 72.2% reported that they graduated from the PSNP after joining GRAD project. Qualitative data revealed that engagement in IGA and VC activities, availability of technical support and extension services to HHs, increased practice of saving, availability of credit services, and commitment of HHs to be self-reliant are main enabling factors identified for graduation from PSNP. Qualitative data also disclosed that recent drought induced by El-Nino phenomenon has brought challenge to livelihood of the HHs and restrained effort to and process of graduation from PSNP.

Supplemental indicators related to Shocks and Recovery

Unlike the previous assessments, 2016's IR assessment incorporated supplemental indicators related to shocks experienced by GRAD HHs and livelihood recovery outcomes. Therefore, main findings of the survey on types of shocks faced by HHs, support received, and HHs' perceived recovery potential are presented as follows:

- 63.2% of GRAD HHs reported experiencing at least one type of shock in the last 12 months. Most common type of weather shocks experienced by the HHs was drought followed by excessive rains and flood. Crop failure, extreme increment in food prices and livestock death are three main economic related shocks reported by the HHs.
- It was also learned that more than half (57.9%) of those HHs that experienced shock/s have received support. The highest proportion (68.5%) of support received by the HHs was food aid followed by material aid (62.5%) like improved seed and animal feed. In addition, most of the HHs that experienced shocks perceive that they have a moderate chance to recover from shock/s and get back to their per-shock livelihood condition.

1.Introduction

1.1. Background of the Project

The basic tenet of the Graduation with Resilience to Achieve Sustainable Development (GRAD) project is to significantly contribute to the efforts of sustained food security of chronically and transitory food insecure households in rural Ethiopia. GRAD seeks to graduate at least 50,000 chronically food insecure HHs from the government’s Productive Safety Net Programme (PSNP) in 16 targeted woredas through an increased HH’s income of at least \$365 per year. The project aims to achieve its objective through three interrelated results: enhance livelihood options of chronically food insecure households in highland areas, improve community and household resilience, and strengthen enabling environment to promote scale-up and sustainability.

Under the auspices of CARE Ethiopia, GRAD is implemented by a consortium of partners. These are Agri-Service Ethiopia (ASE), Catholic Relief Service (CRS/MCS), Organization for Rehabilitation and Development in Amhara (ORDA) and Relief Society of Tigray (REST).The Netherlands Development Organization (SNV) joins as a technical adviser for value chain development and demand driven extension services.

1.2. GRAD Project Goals and Objectives

The overall objective of the five-year, USAID-funded project is to sustainably graduate at least 50,000 households from the PSNP through strengthening of their resilience to income and food related shocks. The following main results and intermediate results are expected as milestones to achievement of the project’s strategic objective.

Result 1—Enhanced Livelihood Options of Chronically Food Insecure Households in Highland Areas
IR 1.1 On- and off-farm economic opportunities, value chains and market access for targeted HHs stimulated.
IR 1.2: An inclusive financial sector promoted and access to a range of financial products and services expanded:
IR 1.3: Extension services upgraded
Result 2 – Improved Household and Community Resilience
IR 2.1: Women’s resilience and access to inputs, services and information increased
IR 2.2: Nutritional status of infants, children and reproductive age women improved
IR 2.3: Climate change adaptation improved
IR 2.4: Promote aspirations for graduation among targeted PSNP HHs and enhance enablers of graduation
Result 3 – Strengthened Enabling Environment to Promote Scale-up and Sustainability
IR 3.1: Collaboration among stakeholders consolidated to promote joint learning and scale up
IR 3.2: Enabling environment improved

1.3. Objectives of the IR Assessment

The major objective of this assessment was to measure current status of outcome indicators of the project and to assess how the benefits of the project were distributed between female headed households (FHH) and male headed households (MHH). The study gave specific emphasis to intermediate result achievements for Results1 and 2 of the project, based on an innovative list of indicators. (See Annex 2 for a list of indicators).

1.4. Geographic Coverage and Time of the Assessment

The GRAD project is implemented in Amhara, Tigray, Oromia, and SNNP regional states covering a total of 16 woredas. In this IR assessment, 14 project implementing woredas represented by 27 intervention kebeles are encompassed. In this assessment, nine Kebeles from REST, seven from ORDA, four from CRS/MCS, three from CARE and three from ASE were included to correspond to the total number of beneficiaries of IPs. The fieldwork was carried out from June 6 to June 18, 2016. (For the details refer to the methodology section of this report.)

1.5. Organization of the Report

This report is structured into three main sections. The first section presents background of GRAD project, its main goal, objectives, and expected results as well as purpose of the current IR assessment. The second section addresses methodology, the kind of approach, survey design, sampling strategy, data collection instruments, and procedure of data collection. The last section discusses major findings of the assessment based on the main indicators of intermediate results of the project.

2. Methodology of the Assessment

This section explains methodology of the GRAD 2016 IR assessment. It focuses on overall approach, household survey, sampling design, methods of quantitative and qualitative data collection, and process of data collection.

2.1. Approach

The major approach of this IR assessment is soliciting quantitative data to examine the current status of intermediate results among male and female headed households. To this end, the assessment largely utilized household survey. Though the assessment was largely based on quantitative data, sufficient amount of qualitative data was collected on various aspects of the project from the beneficiaries and other stakeholders, mainly representatives of financial institutions across the IPs.

2.2. Household Survey

A. Indicators and Questionnaire Design

The intermediate result indicators that were employed in the 2015 IR assessment were reviewed and updated to incorporate feedback on various IR categories and accommodated new GRAD interventions. One of the major revisions was the inclusion of supplemental indicators related to drought and recovery. Four key indicators that deal with drought related shock and GRAD support for recovery were included. In addition, 'IR 2.1: Women's resilience and access to inputs, services, and information increased' was further strengthened to measure male's and female's perception of decision making in household issues, the nature of relationship between husbands and wives and change over issues of gender based violence and harmful traditional practices.

In line with the indicators, a structured questionnaire was developed. The questionnaire was prepared based on revision and modification of survey instruments of the previous GRAD IR assessments. It comprises of background and identification of study sites and HHs , demographic characteristics of HHs, economic opportunities and VCs, access to market, agricultural inputs and services, financial institutions , women's resilience, nutrition and WASH, climate change adaptation, drought and recovery and aspiration to graduate from PSNP (for details see Annex 3).

Prior to field work and data collection, pretest was made to refine the questionnaire and to familiarize the data collectors with the content. Training of data collection team took place so that they administer the questionnaire with efficiency. The pretest was conducted in *Dobotutu* Kebele of *Meskan* Woreda, which is one of the GRAD implementation Kebeles of ASE, on 2nd of June 2016.

B. Sampling Design

The survey employed multistage sampling technique. A probability proportional to size sampling (PPS) technique was applied to select primary sampling units (kebeles) from each IPs. Twenty seven Kebeles were selected from 16 implementation Woredas of the project across all five IPs, in consideration of the total sample size of the assessment (roughly 800 HHs). Simple random sampling technique was applied to select the assessed Kebeles within each of the IP. In order to obtain diverse sample cases per kebele, it was decided to select 30 HHs within each Kebele.

In order to ensure appropriate representation of female headed households (FHHs) and HHs with children (HHWC) less than 2 years stratified random sampling technique was employed. To determine proportion of FHHs and HHWC in the assessment, the 2014 Demographic and Health Survey of Ethiopia was consulted. Accordingly, it was found out that slightly less than a quarter of the HHs in the survey nationally were FHHs and a similar proportion of women in the survey had given birth in the two years preceding the survey. As a result, it was decided to increase this proportion and assign at least a quota of 30% each for the two HH types in each kebele.

Fresh sampling frames (list of HHs targeted in GRAD project at least a year ago) were prepared for each of the 27 Kebeles by respective field offices of the IPs. The sampling frames were consisted of the required variables - sex of head of households and existence of child below 2 years in the HHs. To ensure minimum expected number of the two types of HHs in each sample Kebele, list of GRAD HHs with children below 24 months was compiled and within which 9 HHs were selected by applying simple random technique. Similarly, nine cases were selected within separate list of FHH. Subsequently, the remaining 12 cases were selected by applying the same sampling technique. To ensure standard selection of sample HHs across IPs and study Kebeles, the selection of sample HHs within the Kebeles were undertaken at the central – Green Professional Service (GPS) office. The data collection team who deployed in the study areas was provided with list of sampled HHs in each kebele with replacement at least ahead of 2 days of their arrival. The next table presents distribution of Kebeles per IPs and HHs surveyed in the 2016 IR assessment.

Implementing Partners	# of Sampled Woredas	# of Sampled Kebeles	Type of HHs		Total	# of HHs with child under 24 months
			MHH	FHH		
CARE	2	4	79	41	120	33
CRS/MCS	4	4	92	30	122	45
REST	4	9	122	151	273	105
ORDA	2	7	130	81	211	75
ASE	2	3	72	17	89	36
Total	14	27	495	320	815	294

Source: GRAD IR Assessment 2016 Survey

As shown above, a total of 815 HHs were sampled and interviewed across all IPs. From the total surveyed HHs, 120 (14.7%) came from CARE, 122 (15%) from CRS/MCS, 273 (33.3%) from REST, 211 (25.9%) from ORDA, and 89 (10.9%) from ASE. Out of the total 815 HHs, 320 (39.3%) were FHH and 495 (60.7%) were MHH. The number of HHs with children under 24 months was 294 (36%).

Of the total 14 GRAD implementing woredas sampled in the current assessment, six woredas namely *Lay Gayint* and *Libo Kemkem* of Amhara, *Arsi Negelle* and *Adami Tulu* of Oromia, *Loka Abaya* and *Meskan* of SNNPR are also operational areas of the ENGINE project. In these joint intervention areas, a partnership of the two projects, intensive nutrition related activities have been undertaken over the last years. Therefore, discussion of findings of the assessment particularly nutrition component, data of these joint intervention woredas are analyzed and presented as ENGINE/GRAD area whereas data of the remaining eight selected woredas are denoted by GRAD only area.

2.3. Methods of Qualitative Data Collection and Instruments

Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) were utilized as main qualitative data collection methods. The purpose of the qualitative data was to gather relevant information that supplement and interpret the quantitative data.

FGDs were conducted with selected Male and Female beneficiaries of GRAD project while the KIIs were held with representatives of financial institutions namely, VESAs, RuSACCO, Cooperative unions, and MFIs. Separate FGDs with male and female beneficiaries of the project were conducted in all IPs. In addition, KII and the FGD guides were prepared in line with objectives of the assessment and some indicators of intermediate results (for details please see Annex 4). The table below presents number of KIIs and FGDs conducted per IP in GRAD 2016 IR assessment.

Implementing Partners	# of FGDs			# of KIIs				
	Male	Female	Total	VESA	MFI	RuSACCO	Union	Total
REST	3	3	6	4	4	1	-	9
ORDA	2	2	4	4	1	-	1	6
CRS/MCS	1	1	2	2	1	1	-	4
ASE	1	1	2	2	1	1		4
CARE	2	2	4	4	2	-	-	6
Total	9	9	18	16	9	3	1	29

Source: GRAD IR Assessment 2016 Survey

As stated above, 18 (9 female and 9 male) FGDs were conducted with purposively selected beneficiaries of GRAD in all IPs. In each session, a minimum of six individuals were involved.

Of the total FGDs, 6 discussions were held in the REST intervention communities while in ORDA and CARE operation areas 4 FGDs were held with the beneficiaries of each. In ASE and CRS/MCS selected kebeles the FGDs conducted were two for each.

Twenty nine interviews were held with leaders of VESAs (16 KIIs), RuSACCO (3 KIIs), officials of MFIs (9 KIIs) and cooperative union (1 KII) in all of the five IPs. Staff of respective field office of each IP selected the FGD participants and key informants for the assessment. MFIs, RuSACCO and cooperatives union were selected on purpose since they have working relationship with the GRAD project. Number of FGDs and KIIs per IP was determined in consideration of number of woredas and kebeles selected in the assessment and intention of gather rich qualitative data that supplement the quantitative HH survey data and capture variation across implementation areas on main interests of the assessment.

2.4. Procedure and Process of Data Collection

The fieldwork of the assessment was conducted from June 6 up to June 18, 2016 across all IPs. Both the quantitative and qualitative data were gathered concurrently from selected Woredas and Kebeles of the IPs. A total of 28 (14 males and 14 females) trained enumerators were involved in data collection. Four data collection teams, each composes of 6 to 8 members, were formed and deployed to the field. Tablet computers were employed to administer the interview with sampled HHs.

Prior to field work, the quantitative data enumerators were provided with three days training, which lasted from May 30 to June 1, 2016. Similarly, the qualitative interviewers were provided with one day training on KII and FGD guides of the assessment, procedures, and selection of informants and discussion participants. Representatives of each IP and focal persons of ENGINE project team attended the training of data collection teams and took part in the pretest of the questionnaire.

Data collection teams worked closely with field offices of the IPs and staff assigned for the assignment. Each IP assigned focal persons who assisted and accompanied data collection team throughout the data collection period. GRAD animators and facilitators assisted members of the teams in each sample Kebeles through the identification of selected HHs and scheduled interviews. They were also instrumental in locating HHs and identifying eligible beneficiaries of the project for the FGDs. In some sample Woredas, members of the ENGINE project team undertook supportive supervision during the data collection.

3. Findings of the Assessment

This section presents the findings of the assessment. GRAD has three key result areas, namely *enhance livelihood options of chronically food insecure households, improve community and household resilience, and* strengthen enabling environment to promote scale-up and sustainability. In the present assessment emphasis is given only to the first two and the discussion is organized accordingly.

3.1. Result 1 - Enhanced Livelihood Options of Chronically Food Insecure Households

Under Result 1, the project intervened to enhance livelihood options of chronically food insecure households. This intervention, as per its strategic components, has three intermediate results. These are:

IR 1.1 - On and off-farm economic opportunities, inclusive value chains, and market access for target HHs stimulated

IR 1.2 – Access to a range of financial products and services expanded

IR 1.3 – Extension service upgraded

The assessments under each IR for the Result 1 are explained below.

3.1.1. On and off-farm Economic Opportunities, Inclusive Value Chains and Market Access for Targeted HHs Stimulated

In order to assess the project's achievement of IR 1.1, indicators were developed with reference to project results framework and supplementary indicators provided by CARE Ethiopia. These indicators are grouped under: economic activities, income earnings, access to market, and access to agricultural inputs.

A. Economic Activities

GRAD project provides support to beneficiary HHs to be engaged in a range of activities to diversify income sources. These income sources include: (a) income generating activities (IGAs) and (b) value chain activities (VCs).

The IGAs are small-scale economic activities selected and managed by individuals with self-financing scheme or support from minor credit schemes, and minimal technical support from the project. The IGAs that the project promoted include: petty trade (including grains); small-scale vegetable production and sales; poultry production and sales; small-scale

livestock sales; retail (including shops, restaurants, beverage, and micro-franchise); donkey/horse cart and handicrafts sale.

VCs are implemented in selected GRAD Woredas. The concept refers to production of goods and services and chains them to the next level so that the product moves physically from the producer to the customer adding financial value along the way in the process. The VCs promoted by the project include livestock fattening (cattle and shoats), malt barley, pulses (including faba bean, white pea bean and red bean), honey, and vegetables (including red pepper, onion, tomato, and potato). Table 3.1 presents the list of VCs promoted by region and woreda.

Table 3.1: Type of Value Chains Selected for GRAD Intervention Woredas

Region	Woreda	Type of Value Chains Selected for GRAD woredas
SNNPR	Shebedino	Fattening (shoat and cattle), vegetables (potato and onion), honey
	Hawassa Zuria	Shoat fattening, Pulse, vegetables (red pepper, potato and onion),
	Loka Abaya	Shoat fattening, pulse(red beans), honey
	Hawila Tula	Vegetables (potato and onion), fattening (shoat and cattle)
	Mareko	Red pepper, fattening (shoat and cattle), onion
	Meskan	Red pepper, fattening (shoat and cattle), vegetables (onion and tomato)
Tigray	Alamata	Vegetables (onion and tomato), cattle fattening, Honey
	Ofla	Shoat rearing, honey, vegetables, fattening (shoat and cattle), pulse
	EndaMehoni	Vegetables, shoat rearing, cattle fattening, honey, pulse(faba bean)
	Raya Azebo	Shoat fattening and shoat rearing, cattle fattening
Amhara	Lay Gayint	Malt barley, pulse(white pea beans), potato, shoat fattening,
	LiboKemkem	Cattle fattening, honey, vegetables(onion)
Oromia	Arsi Negelle	Shoat fattening, pulse(white pea beans), red pepper
	Zeway Dugda	White pea beans, vegetables (tomato and onion), shoat fattening
	Shalla	Shoat fattening, pulse (white pea beans), potato
	Adami Tulu	Red pepper, pulse (white pea beans), shoat fattening

Source: GRAD Project Document

Table 3.2 explains the percentage distribution of GRAD HHs who have adopted none, one, or two or more IGAs and VCs since the start of GRAD. Accordingly, about 15% and 42.5% of the sample HHs have adopted one new IGA and VC respectively. About 78 % of the HHs are engaged in two or more IGAs, whilst 37.3 % in two or more VCs. It is only (7%) of the households that did not have any IGA. As for VC (20.2%) were not engaged in VC. The disaggregated result in terms of IP and type of the HH is elucidated in the tables below.

Table 3.2: Percentage of HHs by the Number of IGAs and VCs since the start of GRAD, Total

Type of Economic Activities	None	One	Two or More
IGA	7.0	15.0	78.0
VC	20.2	42.5	37.3

Source: GRAD IR Assessment 2016 Survey

In relation to adoption of VC by HH type, 81 % and 78 % of MHH and FHH were adopted at least one VC since start of GRAD. The next table depicts proportion of MHH and FHH by number of VC engagement since involvement in the project.

Table 3.3: Distribution of Percentage of MHH and FHH who engaged in VCs since start of GRAD

Type of HH	Adopted Number of VC		
	None	One	Two or More
MHH	19.0	39.4	41.6
FHH	22.2	47.2	30.6
All	20.2	42.5	37.3

Source: GRAD IR Assessment 2016 Survey

Table 3.4 depicts the percentage distribution of GRAD HHs engaged in one and more IGA and VC by IP. It also shows households who were not engaged in IGAs and VCs.

Table 3.4: Percentage of HHs Engaged in IGAs and VCs since the start of GRAD by IP

IP		None	One	Two or More
CARE	IGA	0.8	12.5	86.7
	VC	25.0	43.3	31.7
CRS/MCS	IGA	8.2	15.6	76.2
	VC	11.5	38.5	50.0
REST	IGA	2.2	11.7	86.1
	VC	7.3	58.2	34.4
ORDA	IGA	14.7	17.1	68.2
	VC	23.7	27.0	49.3
ASE	IGA	10.1	22.5	67.4
	VC	57.3	34.8	7.9
All	IGA	7.0	15.0	78.0
	VC	20.2	42.5	37.3

Source: GRAD IR Assessment 2016 Survey

Almost all surveyed HHs of CARE and REST were engaged in at least one IGA since start of GRAD. Correspondingly, about 90% of HHs of the CRS/MCS and ASE were involved in IGAs. The vast majority (85.3%) HHs of ORDA were also engaged in the IGAs; of which 68.2% in two or more while 17.1% in one IGA.

In Table 3.5 the percentage of HHs engaged in IGA and VC by HH type is shown.

Table 3.5: Percentage of HHs Engaged in IGAs and VCs Since the start of GRAD By HH Type

IP		MHH			FHH		
		None	One	Two or More	None	One	Two or More
CARE	IGA	1.3	8.9	89.9	0.0	19.5	80.5
	VC	20.3	43	36.7	34.1	43.9	22
CRS/MCS	IGA	7.6	15.2	77.2	10	16.7	73.3
	VC	8.7	39.1	52.2	20	36.7	43.3
REST	IGA	1.6	11.5	86.9	2.6	11.9	85.4
	VC	4.9	52.5	42.6	9.3	62.9	27.8
ORDA	IGA	12.3	17.7	70	18.5	16	65.4
	VC	17.7	26.9	55.4	33.3	27.2	39.5
ASE	IGA	8.3	23.6	68.1	17.6	17.6	64.7
	VC	56.9	36.1	6.9	58.8	29.4	11.8

Source: GRAD IR Assessment 2016 Survey

Table 3.6 portrays the data on types of IGAs and which activities are commonly adopted by FHHs and MHHs. Poultry and petty trade took the lion's share of the desired IGAs as can be seen from the finding.

Table 3.6: Percentage of HHs by Type of New IGAs Adopted since the start of GRAD

Types of IGAs	CARE		CRS/MCS		REST		ORDA		ASE		All GRAD		
	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH	All
Petty trade	92.4	95.1	50	46.7	50.8	58.9	42.3	50.6	33.3	47.1	52.5	59.7	55.3
Vegetable	54.4	58.5	30.4	40	53.3	41.7	52.3	34.6	34.7	47.1	46.3	42.2	44.7
Poultry	72.2	70.7	88	73.3	83.6	74.2	60	51.9	56.9	58.8	72.5	67.2	70.4
Livestock*	36.7	26.8	45.7	53.3	64.8	62.3	46.2	40.7	40.3	17.6	48.3	49.1	48.6
Retail	6.3	2.4	5.4	3.3	4.9	26.5	5.4	11.1	1.4	11.8	4.8	16.6	9.4
Cart	7.6	14.6	14.1	6.7	4.1	0.7	2.3	0	19.4	11.8	8.3	3.4	6.4
Trade/handicrafts	6.3	0	3.3	0	4.1	5.3	10.8	19.8	9.7	5.9	6.9	7.8	7.2
Other	6.3	4.9	9.8	3.3	23	11.9	2.3	2.5	16.7	5.9	11.5	7.5	9.9

Note:* refers to Non-VC

Source: GRAD IR Assessment 2016 Survey

Household survey data also allows further insight into the type of VC adopted since the start of GRAD. Table 3.7 presents the percentage of MHH and FHH engaged in each VC by IP as well as the total percentage of HH engaged in each VC. The table reveals that pulse-red bean was adopted by majority of the HHs; followed by shoat fattening and malt barley.

Table 3.7: Percentage of HHs by Type of VC Adoption since start of GRAD

Type of VCs	CARE		CRS/MCS		REST		ORDA		ASE		All
	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH	
Cattle fattening	-	-	-	-	41.7	19.9	57.5	33.3	6.9	11.8	30.2
Shoat Fattening	68.4	50	85.7	76.7	50	60.6	57.9	60.6	26.4	29.4	58.9
Shoat rearing	-	-	-	-	65.6	62.3	-	-	-	-	
Malt barley	0	100	-	-	-	-	61.4	54.5	-	-	58.9
Honey	25.3	10	-	-	5.6	0	13.7	8.5	-	-	9.1
Pulse- faba beans	-	-	-	-	-	-	-	-	-	-	-
Pulse-White pea bean	-	-	47.9	58.3	-	-	31.6	33.3	-	-	39.3
Pulse-Red Bean	58.5	66.7	80	70	-	-	-	-	-	-	64.8
Vegetable-Red pepper	-	-	53.1	25	26.2	14.3	-	-	12.5	11.8	24.1
Vegetable-Onion	-	-	4.3	0	17.2	6.1	35.6	21.3	4.2	5.9	15.9
Vegetable-Tomato	-	-	-	-	7.1	0	-	-	-	-	1.3
Vegetable-Potato	-	-	5	0	64.7	66.7	68.4	60.6	-	-	38

Source: GRAD IR Assessment 2016 Survey

Those HHs that have adopted a particular VC were asked if they have completed more than one round/cycle of their VC since they joined GRAD. The responses, presented in Table 3.8 below, show HHs engaged in red bean have completed more than one round/cycle, followed by white pea beans, red pepper, potato, malt barley, shoat fattening, onion, cattle fattening, and honey.

Engagement in a particular VC for more than one cycle by HHs can be considered as an indication of commitment of HHs to the particular VC, sustainability of the activity and its economic viability perceived by the HHs. Data from the FGDs showed that, in most cases, the HHs undertake the specific VC activity for more one cycle or round based on their assessment on its profitability in the first round, demand of the product in market as well as in consideration of its prospect in subsequent rounds. In addition, availability of technical and continuous extension services rendered to the HHs are another factors identified.

Table 3.8: Percentage of HHs that have completed more than one round/cycle of their VC since they joined GRAD [from those who have adopted]

Type of VCs	% of HHs
Cattle fattening	61.0
Shoat Fattening	65.0
Malt barley	69.8
Honey	59.1
Pulse-White pea bean	76.3
Pulse-Red Bean	84.7
Vegetable-Red pepper	74.1
Vegetable-Onion	62.5
Vegetable-Potato	70.4

Note: Faba beans and tomato are excluded due to low adoption among the sample HHs
Source: GRAD IR Assessment 2016 Survey

Financial support provision for VC engagement was assessed by collecting information on sources of finance for their VCs. Subsequently, as shown in Table 3.9, it was found that MFIs were the major providers of finance for VCs.

Table 3.9: Source of Finance for VC Engagement

Type of VCs	Source of Finance					
	MFI	Union	RuSACCO	VESA	Self	Other
Cattle fattening	71.7	1.4	4.1	10.3	9.7	2.8
Shoat Fattening	68.3	2.5	4.4	14.4	8.8	1.6
Cereal-Malt barley	16.7	20.4	16.7	22.2	22.2	1.9
Honey	27.9	0.0	2.3	23.3	46.5	0.0
Pulse-White pea beans	37.9	10.3	8.6	24.1	19.0	0.0
Pulse-Red Bean	58.6	0.0	0.0	22.4	15.5	3.4
Vegetable-Red pepper	53.4	0.0	0.0	25.9	20.7	0.0
Vegetable-Onion	38.3	0.0	0.0	21.3	38.3	2.1
Vegetable-Potato	43.2	5.4	8.1	16.2	27.0	0.0

Note: Faba beans and Tomato are excluded due to low adoption by sample HHs
Source: GRAD IR Assessment 2016 Survey

B. Income Earnings

The assessment went further to look at the income earned by the HHs from their engagement in the IGAs and VCs. Accordingly, for IGAs net income and for VCs net profits were measured. Then, the average net income obtained from IGAs in the last 12 months by the HHs was quantified.

As Table 3.10 shows, on average, GRAD HHs adopted each IGA earned income ranging from ETB 5,587 (petty trade) to ETB 769 (poultry) in the last 12 months. However, the results also show that the income earned by HHs engaged in IGAs was highly variable as attested by the standard deviation.

Table 3.10: Average Net Income (in ETB) Earned by HHs in the last 12 months from IGAs Engagement

Types of IGAs	# of HHs	Amount of Net Income Earned			Std. Deviation
		Min	Max	Mean	
Petty trade	378	0	150,000	5,587.0	10,174.2
Vegetable	254	0	22,600	1,965.9	2,871.7
Poultry	504	0	12,005	770.0	1,211.4
Livestock*	284	0	21,600	2,819.0	3,033.4
Retail trade & Services	73	0	56,640	5,252.5	8,558.2
Donkey/horse cart	46	200	21,230	3,661.5	3,770.1
Trade or handicrafts	51	50	8,400	1,819.1	2,009.1
Other	80	0	14,600	3621.6	3047.8

Source: GRAD IR Assessment 2016Survey

In addition, in order to find out the average net income from all new IGAs that the HHs adopted, the statistic was computed. As a result, on average GRAD HHs earned 5,808 ETB in the last 12 months from all new IGAs that they engaged in.

Table 3.3: Average Net HH Income (in ETB) from All New IGAs in the Last 12 Months

N	Minimum	Maximum	Mean	Std. Deviation
815	0.0	150,000.00	5,808.9	9,101.4

Source: GRAD IR Assessment 2016Survey

In Table 3.12, for VCs, data on sales and input cost were collected to measure profit levels. The result indicated that average profits ranged from 5,600 ETB for onion to 1,520 ETB for white pea bean.

Table 3.124: Profit from New/Strengthened Value Chain Engagement during the last 12 months in ETB

Type of VCs	Mean Amount of Production Unit ¹	Mean Cost of inputs	Mean Sales	Mean profit from VC
Cattle fattening	1.91	6,227	10,513.0	4,285.9
Shoat fattening	4.45	2,847	5,244.3	2,397.3
Malt barley	0.44	1,740	6,599.9	4,860.3
Honey	2.29	392	2,523.2	2,131.2
White pea bean	1.17	808	2,328.4	1,520.7
Red bean	0.89	2,153	4,073.5	2,233.4
Red Pepper	0.21	1,308	4,062.1	2,754.1
Onion	0.14	2,270	7,863.1	5,600.4
Potato	0.24	1,178.3	4,552.4	3,374.2

Source: GRAD IR Assessment 2016 Survey

The study also looked at the gross margin per production unit of product calculated as total value of product sales minus total value of purchase input costs divided by production unit. Number of animals was the unit of measurement for cattle and shoat, number of hives for honey, and *timad* (0.25 hectare) of land under cultivation for vegetables and cereals. Accordingly, onion was found to have the highest gross margin while shoat fattening has the lowest.

Table 3.13: Gross Margin per Production Unit in ETB

VC Products	Average Gross Margin	Average Incremental Sales
Cattle fattening	2,521	2,491
Shoat fattening	662	1,015
Malt barley	2,877	505
Honey	1,030	38
White pea bean	8,524	-280
Red beans	931	971
Red Pepper	14,177	887
Onion	38,573	1,618
Potato	13,535	3,558

Source: GRAD IR Assessment 2016 Survey

¹Unit of production for cattle and shoat was number of animals; number of beehives for honey, whereas it was hectares of land for the crops (cereals and vegetables).

Table 3.13 also presents the value of incremental sales of products. It was calculated by deducting total value of product sales last year from total value of product sales of HH's from particular VC in 12 months. The calculation included those who newly embarked on the VC this year. The results show that the value of sales increased, to varying degree, for all products except white pea bean.

An attempt was also made to find out the average total amount of net income obtained from both IGA and VC that was earned by GRAD HHs in the last 12 months. As indicated in Table 3.14, the average net annual income for GRAD HHs was ETB 7,893 (or about \$361)².

Table 3.14: Average Net HH Income (in ETB) from all Sources in the Last 12 Months, by HH

Type	
Type of HHs	Average Net Income from All Sources in the Last 12 Months
MHH	9,133.4
FHH	5,975.7
GRAD	7,893.6

Source: GRAD IR Assessment 2016 Survey

Further analysis was made to see what percentage of the HHs earned at least \$365 from new VCs and IGAs in last 12 months. The result shows that some 36% of the HHs earned the indicated amount or more.

Table 3.15: Percentage Distribution of HHs in their Total Income Earned (in USD) from VCs and IGAs in last 12 months

Amount of Income	# of HHs	Percent
Less than USD 365	525	64.4
USD 365 or more	290	35.6
Total	815	100

Source: GRAD IR Assessment 2016 Survey

In a similar way, average net income from all IGAs and VCs in the last 12 months by IP and GRAD average was assessed. Table 3.16 shows average earning of HHs in each IP operation areas.

²Please note that all currency exchange for 2016 was done using: \$1 = ETB 21.83

Table 3.5: Average Net Income (in ETB) Earned from all IGAs and VCs in the Last 12 Months, by IP

Implementing Partners	Average Net Income from All Sources in the Last 12 Months
CARE	12,041.07
CRS/MCS	7,682.73
REST	7,036.40
ORDA	8,111.46
ASE	4,702.97

Source: GRAD IR Assessment 2016 Survey

It is also learned that the percent of HHs that engaged in at least one new IGA and one VC at a time accounted 65% of the total surveyed HHs. From these HHs, 42% earned USD 365 and more in the last 12 months. Overall, about 27% of all surveyed HHs have adopted at least one IGA and one VC, and have also earned \$365 or more in the last 12 months.

Table 3.17: Percentage Distribution of HHs adopted at least one VC and one IGA and Income earned in last 12 months

Type of HHs by adoption of VC and IGA	# of HHs	%
HHs engaged in at least one IGA and one VC	531	65.2
HHs who did not adopt at least one IGA and one VC ³	284	34.8
Total	815	100
Amount of Income Earned (in USD in last 12 Months) among HHs adopted at least one IGA and one VC at a time		
\$365 or more	223	42.0
Less than \$365	308	58.0
Total	531	100

Source: GRAD IR Assessment 2016 Survey

An attempt was also made to assess an average number of income sources⁴ of sample HHs following their involvement in GRAD. It was learned that on average GRAD HHs had 3.6 sources of income since joining the project. The average source of income of MHH and FHH was 3.7 and 3.4 respectively. The next table shows average source of income of HHs by IP and type of HH.

³ These households were not engaged in at least one VC and one IGA concurrently in last 12 months. Except 28 HHs (which accounted 3.4% of total HHs) that were not engaged in any IGA and VC at all in last 12 months, the remaining HHs have adopted either one or more VC or IGA.

⁴ In the assessment, number of income source implies engagement of HHs in IGAs and VCs promoted by GRAD after their involvement in the project. Therefore, the computation was done by adding both number of IGAs and VCs adopted by HH since joining GRAD.

Table 3.18: Average Number of Income Sources of GRAD HHs since joining the project, by IP and HH type

Average # of Income Sources	Implementing Partners					HH Type		All
	CARE	CRS	REST	ORDA	ASE	MHH	FHH	
	3.9	3.9	3.6	3.6	2.6	3.7	3.4	

Source: GRAD IR Assessment 2016 Survey

C. Access to Market

Supporting good marketing to sustain profitability in VCs is one sub-component of the project. To this end, GRAD promotes access to markets by supporting the establishment of Farmers Economic and Marketing Associations (FEMA) and/or supporting marketing cooperatives. In view of this, beneficiary HHs use of specific outlets to sell their produce was assessed and the finding is presented in Table 3.19.

Table 3.19: Percentage of HHs by Membership in Market Outlets, by HH Type

Marketing Associations	MHH	FHH	All
FEMAs	26.3	15.6	22.1
Farmers Cooperatives	37.6	37.5	37.5

Source: GRAD IR Assessment 2016 Survey

Table 3.20 explains the market share of farmer's cooperatives, FEMA and other aggregators by HH type.

Table 3.20: Percentage of HHs Selling Products through Market Outlets, by HH Type

	MHH	FHH	All
FEMAs	7.9	4.7	6.6
Farmers Cooperatives	14.3	13.8	14.1
Other Aggregators	26.5	19.7	23.8

Source: GRAD IR Assessment 2016 Survey

The survey result also showed the frequency of sale through the same market outlets. As seen in Table 3.20, out of those who reported selling through the market outlets, the majority of the HHs sold their products more frequently through other aggregators, followed by through FEMA and farmers cooperatives. The result of FGDs indicated that in most cases the HHs sell their products through multiple market outlets.

Table 3.21: Percentage of HHs by Number of Times they Sold Products through the Same Market Outlets in last 12 months

Output marketing outlets	Never	Once	More than Once
FEMA	5.6	16.7	77.8
Farmers' Cooperative	2.6	30.4	67.0
Other Aggregators	0.0	13.4	86.6

Source: GRAD IR Assessment 2016 Survey

Regarding fairness of price received, out of those who reported selling through FEMA, 86% reported that they usually received a price that reflects the market value of their goods. 79 % and 65% of those HHs who sold through farmer’s cooperatives and other aggregators respectively reported the same.

Table 3.22: Percentage of HHs Who Believe the Price Paid for Their Products When Selling Through the specific market outlets Is Fair/Reflects the Market Value

Output marketing outlets	Always	Most of the times	Rarely	Never
FEMA	40.5	45.2	14.3	0.0
Farmers cooperatives	41.6	37.7	19.5	1.3
Other aggregators	10.1	55.4	32.1	2.4

Source: GRAD IR Assessment 2016 Survey

D. Access to Agricultural Inputs, Technologies and Services

In order to increase production by target HHs (refer IR-1), the project supports beneficiary HHs to make better use of improved technologies within the promoted VCs. Accordingly, the project promotes selected agricultural inputs and technologies for the specific VCs.

The assessment revealed that those HHs engaged in production of pulses (89.2%) report greatest use of improved seed varieties, followed by red pepper (60.7%), potato (47.2%), malt barley (38.1%), onion (32.1%), and tomato (10.2%).

Most HHs were engaged in vegetable production using improved agricultural practices such as row planting and irrigation. The results indicated that about 94.6% of the HHs engaged in red pepper production reported the practice of row planting, followed by potato, onion, malt barley, and tomato. The use of chemical fertilizer was reported in the majority of cases in the production of pulses and red pepper.

Table 3.23: Percentage of HHs by Use of Technology/Inputs among HHs Engaged in specific VCs

Inputs and technologies	Onion	Tomato	Red Pepper	Malt Barely	Potato	Pulses
Supplemental irrigation	24.5	16.9	-	-	20.5	-
Improved seed varieties	32.1	18.2	60.7	38.1	47.2	89.2
Row planting	38.8	23.3	94.6	33.7	50.8	-
Improved irrigation	11.7	7.5	-	-	-	-
Furrow irrigation	14.5	7.6	-	-	-	-
Fertilizer application	39.7	16.5	87.3	35.2	49.8	92.0
Rope and washer pump	31.4	17.3	45.5	-	36.9	
Agro chemicals	24.2	8.9	66.7	18.9	15.6	51.5
Post-harvest handling (drying system)	-	-	58.2	-	-	-
DLS (Diffused Light Storage)	-	-	-	-	15.1	-
Super Grain Bags	-	-	-	-	-	29.9

Source: GRAD IR Assessment 2016 Survey

The assessment also looked at the use of inputs and technologies specific to livestock. The use of livestock drugs, and cut and carry system were the most commonly used inputs and adopted practice among HHs that are engaged in livestock production as shown in Table 3.24.

Table 3.24: Percentage of HHs by Improved Technologies use for Livestock

Inputs and technologies	MHH	FHH	All
Effective Micro-organism /EM/Chemical	29.5	19.1	25.4
Manual Chopper	50.4	41.3	46.7
UMB [Urea Molasses Block]/ Molasses	47.5	48.8	48.0
Silage making	6.6	5.1	6.0
Concentrate and industrial by-product feed	54.7	54.7	54.7
Urea treatment	27.5	15.8	22.8
Cut and carry system	73.1	64.5	69.7
Planting improved forages	33.4	32.0	32.9
Bokash	1.2	0.8	1.0
Mineral	27.5	23.8	26.1
Livestock drugs	79.8	85.1	81.9

Source: GRAD IR Assessment 2016 Survey

The IR assessment also looked at the source of agricultural inputs for the VCs. Table 3.25 provides a description of the range of sources of selected agricultural inputs for livestock.

The responses obtained from HHs engaged in the respective VC reported the significance of GRAD agro-dealers since they are the major and common source for most VC activities.

Table 3.25: Percentage of HHs by Sources of Agricultural Inputs for Livestock

Inputs and technologies	Farmer Cooperative	Agriculture office	GRAD agro-dealer	Other private sector	Model farmer	Self(own)
Effective Micro-organism /EM/Chemical	2.5	11.1	82.1	2.5	0.6	1.2
UMB/Molasses	2.0	28.4	65.9	3.3	0.3	0.0
Concentrate and industrial by-product feed	3.2	18.8	55.4	19.6	0.3	2.6
Urea treatment	5.0	25.2	66.9	1.4	0.0	0.0
Bokash	0.0	28.6	71.4	0.0	0.0	0.0
Mineral	1.3	2.5	13.3	53.2	1.3	25.9
Livestock drugs	4.9	69.1	11.5	13.5	0.0	1.0

Note: 'Other' option excluded due to low incidence

Source: GRAD IR Assessment 2016 Survey

GRAD HHs engaged in VCs were also asked about their perception on affordability of inputs for specific VCs engagement. The majority of respondents found the price of the inputs to be either very or moderately affordable (for details see Annex 1, Table 1).

3.1.2. An Inclusive Financial Sector Promoted and Access to a Range of Financial Products and Services Expanded

Considering the crucial role of access to financial services for IGAs and mostly VC engagements, GRAD has promoted access to a range of financial services. To this end, the study assessed the use of financial services mainly in terms of savings amounts and loan/credit taking experiences of the HHs.

A. Savings

In order to analyze the saving practice of the HHs, the survey first reviewed whether the HHs opened accounts or if they are members of financial institutions operating in their vicinities.

The survey result showed that 96.9% of the HHs were members of a VESA while 53.4% and 6.9% reported having an account with MFI and bank, respectively. Similarly, about 27.2% reported having membership with a RuSACCO. About 7.5% of the HHs were members of cooperative union.

Membership was also examined in terms of IP. As can be seen in Table 3.26, HHs in the operation areas of CARE, CRS/MCS, REST, ORDA and ASE were largely members of VESA. Low membership in cooperative unions was reported in these operation areas. What is more, the number of HHs that have bank accounts and savings in banks was minimal.

Table 3.26: Percentage of HHs by their Membership⁵ in Financial Institutions in the current year, by IP

Financial Institutions	Implementing Partners					Type of HHs		All
	CARE	CRS/MCS	REST	ORDA	ASE	MHH	FHH	
VESA	99.2	95.9	95.6	98.1	96.6	96.8	97.2	96.9
Cooperative union	0.0	14.8	4.8	12.3	4.5	7.9	6.9	7.5
RuSACCO	0.0	0.0	59.6	26.7	2.2	20.9	37.0	27.2
MFI	58.3	76.0	58.6	41.4	28.1	55.2	50.6	53.4
Bank	5.8	13.9	2.6	9.5	5.6	8.5	4.4	6.9

Source: GRAD IR Assessment 2016 Survey

VESAs are formed under the GRAD project with membership of beneficiaries living in close distance within a village across all intervention areas and IPs. Therefore, in most cases, many VESAs are found within a Kebele as VESAs are established at the village level.

MHHs that reported that they were members of the financial institutions were further asked who the registered member was⁶. The percentages in Table 3.27 identify differences between husbands and wives in their status of membership. In most MHHs, husbands are the registered members of financial intuitions.

Table 3.27: Percentage Distribution in Registered Members of the Financial Institutions (MHHs Only)

Financial Institutions	# of MHH with membership	Husband	Wife	Both
VESA	479	54.7	15.9	29.2
Cooperative union	37	67.6	10.8	21.6
RuSACCO	104	67.3	13.3	19.4
MFI	273	72.3	17.8	9.8
Bank	42	85.0	10.0	2.5

Source: GRAD IR Assessment 2016 Survey

⁵In the assessment, membership in banks and MFIs implies at least one member of the HH has a saving account in these financial institutions operating in the areas during the time of data collection.

⁶In FHHs, women who lead the HHs were the registered members of the financial institutions.

An analysis was also made to estimate proportion of HHs that have saving money in the financial institutions. Accordingly, the result indicated that majority of those GRAD HHs reported they are current members of or have an account in the financial institutions have saved money in the institutions. However, amount of money saved varies among the institutions.

Table 3.28: Distribution of HHs with membership in Financial Institutions by having saving money in the respective institutions

Financial Institutions	# of HH without Saving	# of HH with Saving	Total # of HHs with membership or having an account
VESA	6	784	790
RUSACCO	2	220	222
MFI	99	336	435
Cooperative Union	12	47	59
Bank	2	54	56

Source: GRAD IR Assessment 2016Survey

The assessment also looked at the amount of money saved at the various financial institutions. As can be observed from Table 3.29 below, the highest amount of average total savings last year and mean current balance was in banks.

Table 3.29: Average Saving Last Year and Current Balance, by Institutions, in ETB

	VESA	Coop Union	RuSACCO	MFI	Bank
Mean Total Saving Last Year	369.56	806.45	960.32	627.67	5352.34
Mean Current Balance	815.37	1113.05	1704.44	919.52	5574.73

*Low membership in Bank and Cooperative Union

Source: GRAD IR Assessment 2016Survey

The result of KIIs and FGDs showed that there is variation among VESAs pertaining to the frequency and minimal mandatory saving amount. It is also learned that members of the VESA can have voluntary saving in the VESAs. In some VESAs, members are expected to deposit certain amount of money as mandatory saving in a weekly or bi-weekly basis while in others the saving is once in a month. In addition, in some VESAs the amount of mandatory saving is flexible and differs across seasons of the year and depending on financial capacity of the members. Pertaining to this, members of one of the VESAs in a CARE intervention kebele used to save 5 birr per week but currently reduced it to 3 birr because of current drought, which resulted in yield reduction that affected economic capacity of the HHs.

Table 3.30: Average Saving Last Year and Current Balance, by HH type and Institutions, in ETB

	VESA		Coop. Union		RuSACCO		MFI		Bank	
	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH	MHH	FHH
Mean Total Saving Last Year	389	340	746	911	951	968	719	473	6029	3322
Mean Current Balance	892	698	946	1402	1743	1671	944	878	4556	8632

*Low membership in Bank and Cooperative union

Source: GRAD IR Assessment 2016Survey

It was also found that the average total current HH saving in all institutions was 2,210 ETB. MHHs and FHHs have nearly the same amount of average total saving, while HHs in REST area have the highest (2,691 ETB) and those in ASE area have the lowest (751 ETB) average total current saving.

Table 3.31: Average Total Current Balance with All Institutions (in ETB), by HH Type & IP

IP	Average Total Current Balance (in ETB)
CARE	2,309.7
CRS/MCS	1,584.1
REST	2,691.9
ORDA	2,508.7
ASE	751.0
All	2,210.4
MHH	2,208.8
FHH	2,212.9

Source: GRAD IR Assessment 2016Survey

B. Borrowing

Loan status of HHs involved in GRAD was given due emphasis in the study. Accordingly, data was collected from those households who were members of the various financial institutions such as banks, VESAs, RuSACCOs, MFIs, and cooperative unions regarding loan taking since joining GRAD.

From the five institutions, significant numbers of member households of VESAs, RuSACCOs, and MFIs have taken loan from their respective financial institutions. Due to low membership in banks and cooperative unions, analysis of loan status of households from the latter two was excluded.

The results of KIIs and FGDs disclosed that there is wide variation among the various types of financial institutions in terms of their loan provision capacity, duration of repayment and interest rates. VESAs avail small loan amounts compared to other financial service providers. However, members can access the loan more frequently than they can from other financial institutions as loan repayment period is short in VESAs. In most VESAs, members are expected to repay their loan within three to six months. However, the loan repayment period can range from six months to two years in RuSACCO and MFIs.

MFIs were found to be the major institutions from which households took loans. As indicated in Table 3.32, about 91.3% of HHs who had an account with MFI have taken at least one loan. Data disaggregated by sex of HH head showed that the number of FHHs (93.2%) who took a loan from an MFI is slightly higher than that of MHHs (90.1%). The second important loan provider institution was VESA from which 72.9% of its members took a loan. The difference in the number of FHHs and MHHs who took the loan was not significant in this instance.

Table 3.32: Percentage of HHs That Took Loan from Various Institutions since Joining GRAD

Financial Institution	# of HHs	% of HHs taking a loan		
		MHH	FHH	All
VESA	576	73.5	72.0	72.9
RuSACCO	89	39.4	39.8	40.1
MFI	397	90.1	93.2	91.3

Note: Bank and cooperative union excluded due to low membership of the HHs
Source: GRAD IR Assessment 2016 Survey

Disaggregated data by IPs showed that there was significant variation in the number of member households who took loans from different sources. In areas where CARE operates, the majority of member HHs have taken loan from VESAs (98.3%) and MFIs (91.4 %). Similarly, majority member HHs in CRS/MCS, REST, and ASE have taken a loan at least once from an MFI (see Table 3.33).

Table 3.33: Percentage of HHs Taking a Loan* since joining GRAD, by IP

Institutions	CARE	CRS/MCS	REST	ORDA	ASE	All
VESA	98.3	56.4	62.5	79.2	76.7	72.9
RuSACCO	-	-	37.4	48.2	-	40.1
MFI	91.4	95.7	98.8	72.4	92.0	91.3

*Only for HHs which members of the financial institution
Source: GRAD IR Assessment 2016 Survey

Those HHs reported to have taken loans from financial institutions were asked how many times they took loans. As can be seen from Table 3.34, more HHs took loans more than once from their VESA than any other source.

Table 3.34: Percentage of HHs that Taken Loans Once and More Since joining GRAD

Institutions	# of HHs	% of HHs taken Once	% of HHs taken More than Once
VESA	572	38	62
RuSACCO	87	69	31
MFI	394	67	33

Source: GRAD IR Assessment 2016 Survey

The number of times HHs took loans from the various institutions was also considered as an important indicator of sustainable involvement of the HHs in different types of IGAs and VCs. The frequency of loan taken shows sustainable availability of credit service for the HHs. Accordingly, the highest average number of times GRAD households taking a loan was found to be from VESA which is close to thrice. The second source of loans from which member households took loan almost twice is MFIs. There is no significant difference in the frequency of loan taking between FHHs and MHHs.

In the study, GRAD HHs' access to loan service from formal financial institutions was also further assessed. As presented in table below, 54.5% of GRAD HHs were received loan from formal financial institutions⁷. Of these HHs (444 cases), 41% were received loans more than once from the institutions. In other words, 22.3% of the total GRAD HHs were taken more than once loans from the formal financial institutions. Next table portrays distribution of HHs taking loans from the institutions by type of HHs and IP.

Table 3.35. Percentage of HHs Received loans from formal financial institutions by type of HH and IP

Loan from formal Institutions	Implementing Partners					Type of HHs		All
	CARE	CRS	REST	ORDA	ASE	MHH	FHH	
% of HHs Received loan from formal Institutions	51.7	73.0	67.0	41.2	25.8	53.3	56.3	54.5
% of HHs received more than once Loans from Formal Institutions	29.0	50.6	37.7	54.0	13.0	43.2	37.8	41.0

Source: GRAD IR Assessment 2016 Survey

The average amount of loans taken by member HHs from their respective institutions was also computed to assess the loan status of the households. Table 3.36 shows that MFIs

⁷ In the assessment, formal financial institutions include a MFI, RuSACCO and cooperative union

provided the largest amount of loan, for GRAD households, which was about 7,344 ETB on average. The second important loan provider was RuSACCOs that lent about 6,007 ETB on average to its members. As compared to RuSACCOs and MFIs, the amount of money borrowed from VESAs was found to be very small as shown in the table. However, the number of times the HHs took a loan from VESAs was higher compared to other institutions. Those households who took loan from RuSACCO, data disaggregated by type of HH indicated that the average amount of loan taken by MHHs was almost double than that of the FHHs. Whereas, in the case of VESA, there is no significant difference between the amount of loans taken by MHH and FHH.

Table 3.36: Mean Amount of Loan Taken from Different Sources by Member Households

IP	Mean No of Times Loan Taken			Mean Amount of Loan (in ETB)		
	VESA	RuSACCO	MFI	VESA	RuSACCO	MFI
CARE	7	-	1	2,477.26	-	4,613.00
CRS/MCS	1	-	2	1,052.02	-	7,627.91
REST	2	1	1	2,148.39	4,733.33	7,763.29
ORDA	2	2	2	863.22	8,838.15	9,966.32
ASE	2	-	1	1,101.54	-	3,653.13
All GRAD	2.95	1.4	1.6	1,603.97	6,007.24	7,343.72
MHH	3.01	1.43	1.73	1,602.18	8,217.50	7,906.23
FHH	2.85	1.38	1.4	1,606.74	4,126.17	6,429.51

Source: GRAD IR Assessment 2016 Survey

Average amount of loans taken by HHs from all service providers (both formal and informal financial institutions) was also assessed. It was learned that GRAD HHs were received an average 5,220 ETB from all service providers since joining the project. In this regard, significant difference was observed in average amount of loans taken by MHH (5,490 ETB) and FHH (4,804 ETB). The next table depicts the average amount of loans received by HH type and IP.

Table 3.37: Average amount of credit (in ETB) received by HHs from all loan providers since joining GRAD by IP and HH type

Average amount of credit	Implementing Partner					HH Type		All ⁸ (N=814)
	CARE	CRS	REST	ORDA	ASE	MHH	FHH	
Average amount of credit received by GRAD HHs	4,799	6,134	6,863	4,267	1,749	5,490	4,804	5,220

Source: GRAD IR Assessment 2016 Survey

⁸ This computation excluded an outlier case – a HH found in ORDA operation area and reported taking a total amount of 142,000 ETB loans from the financial institutions since joining the project.

Of total 815 HHs, 716 (88%) were taking loans at least from one of the financial institutions (VESAs, RuSACCOs, cooperative union & MFIs). These HHs were received an average 5,943 ETB credit since joining GRAD. The next table shows a comparison of average amount of credit received between all GRAD HHs and those GRAD HHs taking loans from one of the financial institutions since joining the project.

Table 3.38: Average amount of loans (in ETB) received by all GRAD HHs and HHs taking loans from at least one of the financial institutions

Average amount of credit	N	Minimum	Maximum	Mean	Std. Deviation
Average amount of credit received by all GRAD HHs	814	0	46000	5,220	6,049
Average amount of credit received among GRAD HHs who taking loan at least from one of the institutions	715	100	46000	5,943	6,113

Source: GRAD IR Assessment 2016 Survey

The HHs who have taken loan from the financial institutions were asked whether they have prepared a business plan in order to take the required loan. In all cases, the majority of them have prepared business plan which was supposed to be implemented once they got the loan. As indicated in Table 3.39, all HHs who took loans from MFI, facilitated by CARE and ASE, have developed business plan in order to take the loan. In implementation areas of REST, a significant number of HHs took loan from VESA without preparing a business plan. Regarding preparing a business plan in general, 81.7% of the HHs have prepared a business plan to take loan from any one of the three loan providers.

Table 3.39: Percentage of HHs that Prepared Business Plan to Take a Loan

Loan Providers	Implementing Partners					All
	CARE	CRS/MCS	REST	ORDA	ASE	
VESA	88.0	98.5	77.6	98.8	95.4	90.2
RuSACCO	-	-	84.7	92.6	-	87.2
MFI	100.0	98.9	81.0	93.5	100.0	91.1

Source: GRAD IR Assessment 2016 Survey

The study also assessed the proportion of HHs that utilized the loan for the purposes as stated in their plan. Table 3.40 exhibits that the majority of member households claimed to have used the loan money for the purposes indicated in their business plans. Accordingly, from the total number of those HHs who developed business plans and took loans from VESA, RuSACCO and MFI, 71.5%, 70.1% and 62.7%, respectively, used the loan for the initially intended purposes.

The result of KIIs and FGDs also confirmed that in most cases, the HHs have received the loans from RuSACCO and MFIs with intention of engaging or expanding their economic activities including petty trade, poultry production, cattle and shoat fattening, and honey production. However, some HHs have practice of borrowing money from VESAs to cover household expenses ranging from buying food items, cost of medication, school fee and fulfill household utensil to construction of new houses.

Table 3.40: Percentage of HHs who used proportion of loans for the purposes as stated in the Business Plan

Source of Loan	All	Most	Half	Some	None
VESA	71.5	19.1	8.1	0.9	0.4
RuSACCO	70.1	11.5	16.1	2.3	0.0
MFI	62.7	23.6	11.9	1.5	0.3

Source: GRAD IR Assessment 2016 Survey

Loan repayment status of loan beneficiaries can be considered as one important indicator to measure the effectiveness of such households in their IGA and VC engagements. To this end, relevant data were collected to assess whether HHs have paid their loan on schedule and fully repaid mature loans.

Table 3.41 shows the significant majority of member households who took loans from the various financial sources have repaid their loan debt on schedule. From the total number of HHs who took loan from VESAs, RuSACCOs, and MFIs, 96.7%, 97.7% and 91% respectively, have repaid their loan debt as per the repayment schedule stated in their loan agreement.

Data disaggregated by IP indicate that in areas where CARE operates, all HHs who took loans from VESA have repaid their loan on schedule. On the other hand, in areas where ASE operates, close to 42% of HHs who took loan from an MFI did not repay their loan as per the agreed schedule. Though some difference is observed between MHHs and FHHs regarding repayment on schedule, the table shows that these differences are not significant.

Table 3.41: Percentage of HHs that paid loans on schedule

Financial Institutions	CARE	CRS/MCS	REST	ORDA	ASE	MHH	FHH	All
VESA	100	95.5	98.1	97.5	86.2	96.6	96.9	96.7
RuSACCO			98.3	96.3		100.0	95.7	97.7
MFI	85.5	86.5	96.8	98.4	57.9	88.8	94.6	91.0

Source: GRAD IR Assessment 2016 Survey

Apart from timeliness of loan repayment, those households who took loans from various sources were also assessed as to whether they have fully repaid their mature loans. It was found that the majority of such HHs have fully repaid their loan at the end of the loan repayment period. As indicated in Table 3.42, 88.8%, 86.1% and 78.8% of households who

took a loan from a VESA, RuSACCO and MFI, respectively, have fully repaid their loan by the agreed deadline. Significant differences were observed between FHHs and MHHs regarding their ability to fully pay their mature loans on time though there was no consistency across the various sources. In the case of VESAs and RuSACCOs, the percentage of MHHs who fully repaid their loans on time is greater than that of FHHs.

Table 3.42: Percentage of HHs that fully repaid Mature Loans⁹

Financial Institutions	CARE	CRS/MCS	REST	ORDA	ASE	MHH	FHH	All
VESA	87.2	93.8	98.7	78.5	89.1	91.3	84.9	88.8
RuSACCO	-	-	96.2	66.7	-	94.7	78.0	86.1
MFI	66.1	78.7	95.5	59.7	44.4	73.2	87.8	78.8

Source: GRAD IR Assessment 2016 Survey

Result of KIIs and FGDs showed that the current drought and erratic climatic conditions have affected the saving and loan repayment capacity of those HHs taking loans from MFIs. Hence, the rate of repayment of matured loans is delayed in some intervention areas of GRAD. In this regard, result of interview with an informant from Metemamen MFI, which is one of MFIs working with CRS/MCS, disclosed that so far a total of ETB 10,400,300 loan given to GRAD beneficiaries by the institution. From this amount, only about ETB 400,000 was not collected from the debtors. Compared to previous years, this year farmers were affected by the drought and faced difficulty of repaying loans on time. As a result, an estimated amount of 167,000 ETB mature loans has not been collected in this year. Meklit, OMO, and Sidama MFIs have also experienced similar repayment problem.

3.1.3. Extension Services Upgraded

As part of its objectives, GRAD has created access to various extension services accompanied by relevant trainings. In line with this, various IPs and government structures reached the HHs with the aim of improving livelihoods. Accordingly, sample HHs in this study were assessed whether they have received extension services, including market information, from different sources.

Access to market information was considered one of the key strategies of livelihood improvement by GRAD. As a result, since their involvement in GRAD, 66% of sample HHs indicated that they have obtained market information before taking their products to market. Although it was not statistically significant, there was slight difference in the accessibility of market information by MHH and FHH as 66.9% of the former and 64.7% of the latter have received market information before selling their products. Those households who obtained market information were also asked to mention the main sources of

⁹Paying loan on schedule refers to whether HHs pay loans regularly as per schedule set. Paying mature loans, on the other, hand refers to whether HHs have paid loans whose final payment day had been reached.

information. There were various possible sources of market information, which include development agents, NGOs, mass media, model farmers, local merchants, GRAD frontline staff, friends/neighbors, and VESAs/RuSACCOs. As indicated in Table 3.43, the majority of these households (67%), mentioned development agents as their source of product market information.

Table 3.43: Percentage of HHs Who Obtained Market Information from Various Sources

Sources of market information	MHH	FHH	All
Development Agents	64.0	71.5	66.9
NGO	24.5	29.0	26.2
Model Farmer	13.9	12.1	13.2
GRAD frontline staff /facilitators/animators	6.6	9.2	7.6
Local Merchants	6.9	6.8	6.9
VESAs/RuSACCOs	6.6	5.8	6.3
Friends/neighbors	6.9	4.3	5.9
Mass Media	6.9	3.4	5.6

Source: GRAD IR Assessment 2016 Survey

In a similar way, access to technical assistance and/or extension services for those HHs involved in VCs was assessed. From the sample HHs engaged in VCs, the majority of them indicated that they have obtained technical assistance from various sources such as development agents, model farmers, agro-dealers, GRAD frontline staff, and animators/facilitators. Development agents were most frequently mentioned by the majority of the HHs as source of technical assistance and/or extension service as well. As indicated in Table 3.44, 82% of HHs mentioned that they got such services from DAs. Next to the DAs, GRAD frontline staff and animators/facilitators were also mentioned as sources of such services by about 73% and 69% of the HHs engaged in VCs respectively.

Table 3.44: Percentage of HHs Who Received Technical Assistance /Extension

Source of Technical Assistance & Extension Services	CARE	CRS/MCS	REST	ORDA	ASE	All
Development Agents	94.8	70.6	93	78.8	48.6	82.0
Model Farmers	68.4	36.7	46	37.9	22.7	43.6
Agro-Dealer	33	46.2	19.6	8.1	32	23.9
GRAD frontline staff	99.1	48.7	91.9	57.3	52	73.7
Animators/facilitators	79.5	75.6	65.6	75.3	38.7	69.1

Source: GRAD IR Assessment 2016 Survey

The HHs who got technical assistance and/or extension services from the aforementioned sources were also asked to indicate how often they got such services from the respective sources. GRAD animators/facilitators were mentioned to be providing the services more

frequently as compared to other sources. As indicated in Table 3.45, half of the HHs received such services from GRAD animators/facilitators once a week. GRAD frontline staff were also mentioned by 36% of the HHs as the second most important actors in providing such services once a week. Similarly, 43.5% and 38.7% of these HHs indicated that they have gotten such technical assistance and services from DAs and model farmers once a month.

Table 3.45: Percentage of HH in Terms of How Often They Obtained Extension Service

Source of Extension Service & Technical assistance	Frequency of Obtained Service and Assistance			
	Once in two weeks	Once in a month	Once in two months	Once in a quarter
Development Agent (DA)	31.7	43.5	11.1	10.6
Model Farmer	18.8	38.7	21.7	18.8
Agro-Dealer	31.4	31.4	14.9	19.7
GRAD frontline staff	36	34.9	14	11.9
Animators/facilitators	50.9	37	6.1	3.7

Source: GRAD IR Assessment 2016 Survey

An effort was made to assess the quality of the provided extension services based on perception of the beneficiaries. Accordingly, the households were asked to judge the quality of the services by rating High Quality, Moderate Quality, or Poor Quality. Consequently, the quality of extension services provided by GRAD front line staff was rated as the first followed by services rendered by animators/facilitators. As indicated in Table 3.46, 88% and 78.6% of the service beneficiaries indicated that GRAD frontline staff and animators/facilitators provided high quality extension services. On the third place, the services provided by Development agents were perceived as high quality by 75.7% of the households.

Table 3.46: Perceived Quality of Extension Service, percentage of HHs

Source of the Services & Assistance	High quality	Moderate quality	Poor quality
Development Agent (DA)	75.7	23.9	0.5
Model Farmers	63.2	36.5	0.3
Agro-Dealers	72.6	26.9	0.5
GRAD frontline staff	88.2	11.8	0.0
Animators/facilitators	78.6	20.9	0.6

Source: GRAD IR Assessment 2016 Survey

Apart from extension services GRAD has also provided trainings on various issues for these HHs in order to improve their livelihood strategies. Thus, the accessibility of these trainings by the HHs and their effectiveness was assessed. HHs who had at least one VC were asked

whether they received training on the value chain in which they were participating. The majority indicated that they were trained on various topics related to their VCs. Compared to other implementing partners; most of the GRAD HHs found in areas where REST operates had taken more training. As the data show, HHs under REST have taken at least one of the trainings on VC. The second and third implementing partners in providing such training to GRAD HHs were CARE and CRS/MCS as explained in Table 3.47.

Table 3.47: Percentage of HHs Who Took Training on VC, By IP*

Implementing Partners					All
CARE	CRS/MCS	REST	ORDA	ASE	
85.6	82.8	93	62.6	54.7	79

** Only for HHs that have adopted at least one VC*

Source: GRAD IR Assessment 2016 Survey

There was further assessment on the types of trainings given to these HHs. As indicated in Table 3.48 below, almost 92% of the HHs have taken training on use of technologies and practices for production. As the table elucidates, 74% and 46.6% of these HHs mentioned they have taken training on marketing and post-harvest handling respectively.

Table 3.48: Percentage of HHs Who Received Training on Various Topics

Main Training Topics	Percent of HHs
Production (use of technologies and practices)	91.9
Marketing	74.0
Post-harvest handling	46.6
Other issues	7.6

Source: GRAD IR Assessment 2016 Survey

Field observation of plots of model farmers is one of the mechanisms of experience sharing and creating awareness through practical demonstration. Accordingly, there was an effort to assess the extent of GRAD household's involvement in such practices. From the HHs surveyed, 50.3% responded that they have attended field days and group discussions conducted on model farmer plots during the year.

FGDs indicated that the continuous extension services and technical assistance including trainings delivered were vital and contributed to the effective and profitable engagement of HHs in different VC activities. In most of the FGD sessions, the participants mentioned technical assistances of GRAD frontline staff and trainings received from the project as main factors contributing to their profitability from their engagement in IGAs and VCs.

3.2. Result 2 - Improved Household and Community Resilience

Under Result 2, GRAD seeks to improve community and household resilience by reducing vulnerability to climate-related shocks and strengthening the capacity to cope with (absorb) and recover from economic (income and market related), food production and health related shocks. Accordingly, GRAD has engaged in interventions that further expand HH options to protect against shocks and recover from impacts of the shocks without irreversible depletion of assets as well as reduction in the associated financial and social capital.

To achieve this, GRAD clings to its main objective: to contribute to increased resilience of beneficiary HHs, which will also reinforce the economic opportunities stated above, in Result 1. Thus, in this section, the findings will show whether such results are being realized. The specific intermediate result covered in this assessment included:

- IR 2.1 - Women resilience and access to inputs, services and information increased
- IR 2.2 - Nutritional status of infants, children and reproductive age women improved
- IR 2.3 - Climate change adaptation improved
- IR 2.4 - Promote aspiration for graduation among targeted PSNP HHs and enhance enablers' graduation

3.2.1 Women's Resilience and Access to Inputs, Services and Information Increased

Women play an essential role in maintaining every HH and hence empowering them is essential to building resilience of the household and the community. In light of this, the study assessed gender equality and women's empowerment in terms of their decision-making in household affairs, access to inputs, access to market and information and the division of labor within a HH. The analysis below examines both FHHs and MHHs, thus in some cases results that were favorable towards women's resilience were positively influenced by the inclusion of FHHs (where men would be much less likely to dominate decision-making).

To assess gender equality the level of decision making at the household level should be considered. Thus, data was collected from GRAD HHs regarding power of decision making on various household issues. The study found out that in the majority of the cases decisions were made jointly by both the wife and husband. This is affirmed in the table below, by 90% of the respondents (see Table 3.49).

FGDs conducted with wives in all implementation woredas also confirms joint decision making by husband and wives on major household issues. Female FGD participants in REST implementation areas noted that decisions on matter of mate selection for children, saving money and even their mobility to town and market was decided by husbands prior to the intervention.

Table 3.49: Manner of decision-making over HH Issues, percentage of HHs

	Only by men	Jointly	Only by women
Wife			
Income the HH earned	5.5	93.0	1.4
Buying agricultural inputs	7.2	91.4	1.2
Paying household necessities/utilities	3.7	92.0	4.1
Spending money for personal expenses	4.1	92.4	3.5
Buying food items for household	2.7	85.9	11.2
Sale of livestock	8.0	90.5	1.4
Husband			
Income the HH earned	3.5	93.5	2.9
Buying agricultural inputs	6.5	91.0	2.2
Paying household necessities/utilities	3.5	91.6	4.7
Spending money for personal expenses	7.5	90.0	2.4
Buying food items for household	2.6	87.0	10.2
Sale of livestock	7.2	91.8	1.0

Source: GRAD IR Assessment 2016 Survey

Another indicator of gender equality is the accessibility of various resources and opportunities by women. Accordingly, assessment of such resources by women in GRAD households was conducted. Table 3.50 shows that the majority of women had access to resources such as agricultural production inputs (91.1%), market information (81.4%) and market to sell their products (86.7%). As far as these resources are concerned, no significant differences were observed between women in FHHs and women in MHHs.

Leadership of women in VESAs¹⁰ was also assessed. It was found that 23.9% of women in the GRAD HHs have held (or currently hold) one such leadership position. In this case, compared to women from MHHs (16.4%), women from FHHs (35.6%) had relatively more access to leadership positions in VESA.

¹⁰Holding leadership position in VESA implies assuming one of the four common leadership positions namely chairperson, secretary, cashier or treasurer of VESA.

Table 3.50: Percentage of women having access to various resources, both in FHH and MHH

Access to resources	MHH	FHH	All
Access to different agricultural production inputs	92.4	89.0	91.1
Access to Market information	80.1	83.4	81.4
Access to Market to sell your products	86.2	87.6	86.7
Hold a leadership position in VESA	16.4	35.6	23.9

Source: GRAD IR Assessment 2016 Survey

Further analysis on women’s access of agricultural inputs, market information, and market outlet was also conducted across the areas of implementation. In a similar manner, the majority of women in almost all project areas had access to agricultural production inputs, markets, and market information. Women in areas where REST operates had greater access to all of these resources than those women in the other project areas.

Female FGD participants in REST implementation areas mentioned the accessibility of agricultural inputs and market information in their locality. However, women in *Endamehoni* Woreda noted long distances to market places as a discouraging factor. In ORDA areas, women stated the availability of saving and credit as enabling factor to easily access inputs. In ASE and CRS/MCS implementation areas, female participants disclosed that women in polygamous households do not have equal access to agricultural inputs and services, since preference is given to only one of the wives. As indicated in Table 3.51, a significant number of women in households under REST had access to agricultural inputs, market information, market access, and leadership positions in VESA.

Table 3.51: Percentage of Women Having Access to Various Resources, by IP

	CARE	CRS/MCS	REST	ORDA	ASE	All
Access to different production inputs	98.3	90.8	93.7	85.3	87.1	91.1
Access to Market information	89.7	78.8	91.2	70.0	69.4	81.4
Access to Market to sell your products	93.2	75.6	97.4	77.2	81.9	86.7
Hold a leadership position in VESA	25.8	9.8	31.9	23.7	16.9	23.9

Source: GRAD IR Assessment 2016 Survey

Women who held (or currently hold) leadership position were asked to specify which of the five position they held (or currently hold) in their respective VESA. Accordingly, the majority (34.9%) of them have served as treasurers. Moreover, 25.1% of them have served as chairperson and the remaining 18.5% and 21.5% served as secretary and cashier of their VESA, respectively.

Table 3.52: Percentage of Women Having Various Leadership Positions In VESA*

Leadership Position in VESA	%
-----------------------------	---

Chairperson	25.1
Secretary	18.5
Cashier	21.5
Treasurer	34.9

**Only for women who have ever held (currently hold) a leadership position in their VESA*

Source: GRAD IR Assessment 2016 Survey

Women in the sample households were also asked whether there was change in the amount of time they had for rest, social and/or leisure activities. As shown in Table 3.53, the majority of women in GRAD households (61.4%) indicated that the amount of time for such purposes has increased during the past year. Comparatively, women in MHHs (64.4%) had more rest and leisure time than those in FHHs (57.0%).

Table 3.53: Trends of Change In the Amount Of Time for Rest, Social, and/or Leisure Activities

Time for rest, social and leisure	MHH	FHH	All
Increased	64.3%	57.0%	61.4%
Remained the same	14.1%	16.8%	15.1%
Decreased	21.6%	26.3%	23.4%

Source: GRAD IR Assessment 2016 Survey

Women in the survey, who have children of both sexes, were asked if they assigned similar HH tasks to daughters and sons. Out of the 550 women for whom the question was relevant, about 80% responded in the affirmative, while the remaining 20% reported that they didn't assign similar HH tasks to daughters and sons.

The study also looked at the trend in the relationship between wives and husbands at the household level as an indicator of gender equality. Accordingly, husbands and wives were approached with a set of items for which they indicated their attitude about the trends in relationship with their spouses in the last three years. A scale with five indicators was developed and used to measure these changes. Consequently, the findings for all of the indicators showed that there was significant improvement in the relationship and cooperation between the spouses in the sampled households.

A majority of the sampled wives and husbands agreed that there were positive changes in the wife-husband relationship as measured by the five indicators in the scale (see Table 3.54). This finding is also supported by qualitative data. Women FGD participants in all implementation areas, except in ASE, reported increased engagement of husbands and sons on domestic chores. Trainings and messages transmitted in VESA meetings are pointed to as a positive force encouraging men to assist wives and wives to request assistance. Female

FGD participants in ASE noted that despite trainings and meetings on the issue men in their households still shy away from domestic tasks.

The qualitative study also looked in to how men in all implementing areas see the improvement of women in their community since the start of GRAD. Accordingly, it was found that most men believe that the status of women showed marked improvement since the start of GRAD. According to the respondents, improved access to loans and men sharing domestic tasks fostered the most improvement in lives of women in their communities.

Table 3.54: Trend in relations between men and women in the last three years

	Strongly Disagree	Disagree	Agree	Strongly Agree
Wives				
Men are respecting women's idea to solve conflicts at household levels	2.9%	3.1%	68.4%	25.7%
Husbands are showing smiling faces to their wives and greet them	2.5%	1.9%	71.8%	23.9%
Husbands are sitting and eating with their wives	3.7%	5.1%	61.0%	30.2%
Husbands share HH chores with their wives	2.1%	7.0%	68.5%	22.4%
Husbands care for children while wives are away on other engagements	2.1%	.8%	71.2%	25.9%
Husbands				
Men are respecting women's idea to solve conflicts at household levels	2.9%	1.2%	67.7%	28.2%
Husbands are showing smiling faces to their wives and greet them	3.5%	0.8%	70.7%	25.0%
Husbands are sitting and eating with their wives	2.1%	3.1%	62.6%	32.2%
Husbands share HH chores with their wives	2.3%	5.3%	68.0%	24.4%
Husbands care for children while wives are away on other engagements	3.1%	1.4%	68.0%	27.4%

Source: GRAD IR Assessment 2016 Survey

Changes in a variety of gender based violence over the past three years were assessed as another indicator of gender equality. A significant number of both the sampled wives and husbands indicated that gender based violence as physical or verbal abuse of women by men, the practices of FGM and early marriage have decreased over the last three years (see Table 3.55).

Table 3.55: Perception in Change in Gender Based Violence and Harmful Practices

	Increased	Remained the same	Decreased
Wives			
Physical or verbal abuse of women by men	0.2%	1.5%	98.3%
FGM	0.4%	1.3%	98.2%
Early marriage	0.2%	1.5%	98.2%
Husbands			
Physical or verbal abuse of women by men	0.6%	2.7%	96.7%
FGM	0.2%	2.2%	97.6%
Early marriage	0.0%	1.9%	98.1%

Source: GRAD IR Assessment 2016 Survey

From the qualitative study, female FGD participants in ORDA and REST noted the decreasing practices of FGM and early marriage. In CRS/MCS areas, participants noted that young girls are forced to migrate to Middle East countries to avoid early marriage. In ASE areas, female FGD participants stated that although the incidences are decreasing they are still practiced in their community. The qualitative study also captured men's perception of the HTP prevalence in their community, and in contrast to female discussants, all the men in the four implementation areas unanimously reported decreasing HTP in their communities.

As all community members clarified the education and awareness creation by the government, religious institutions, traditional community leaders, law enforcement bodies, health extension workers, and GRAD staff helped to decrease the practice of HTPs.

3.2.2. Nutritional Status of Infants, Children and Reproductive Age Women Improved

Under Result 2, IR 2.2, GRAD seeks to improve the nutritional status of infants, young children, and reproductive age women¹¹. In view of this, the nutritional behavior of infants, children, and reproductive age women was assessed.

As explained in methodology section of this report, of the total 14 Woredas covered in the current assessment, six Woredas (Lay Gayint, Libo Kemkem, Arsi Negelle, Adami Tulu, Loka Abaya, and Meskan) are also operational areas of the ENGINE project. In these woredas, the two projects jointly have undertaken activities aimed at promotion of proper nutritional behaviors by infants, young children and reproductive women. In this regard, therefore, the assessment tried to compare achievements in sampled joint intervention woredas of GRAD and ENGINE projects. In subsequent section of this report, data of these joint intervention woredas are analyzed and presented as ENGINE/GRAD area whereas the remaining woredas are denoted by GRAD only.

In order to easily understand and analyze the proper nutritional behavior among infants and young children, an assessment of the number of children under the age of 24 months took place. Accordingly, sample households were asked to count how many children under age of 24 months were in their houses. From the total of 815 sampled households (424 GRAD only, and 391 ENGINE/GRAD), 291 indicated that they had one child under the age of 24 months and only three households indicated that they had two children under the age of 24 months. The analysis is based on the 291 cases (see Table 3.56 below). (For detail distribution of cases across the sampled woredas, please refer to Annex 1 Table 5).

¹¹For GRAD, this refers to appropriate nutritional behaviors, not anthropometric measures.

Table 3.56: Distribution of Reported Age of Sampled Children in Months during the Survey by GRAD only and ENGINE/GRAD areas

Age of Children (in Months)	# of Sampled Children		
	GRAD only	ENGINE/ GRAD	All
<= 5	66	36	102
6 – 8	16	13	29
9 – 23	73	87	160
Total	155	136	291

Source: GRAD IR Assessment 2016 Survey

Colostrum Consumption and Breastfeeding Practices

The practice of feeding newborn infants with colostrum and breast feeding for at least six months is taken as one of the good indicators of health knowledge. As part of the indicator for change in nutritional and health knowledge, mothers in the GRAD targeted HHs were assessed whether they fed colostrum to their newborns. Similarly, these mothers were also assessed whether they have ever breastfed their children in the last 24 months. The results from both GRAD only and ENGINE/ GRAD intervention woredas showed that the vast majority (93.8%) have fed their children with colostrum and 97.3% of them breastfed their children born in the last 24 months (see Table 3.57)

Table 3.57: Percentage of HHs who fed their child colostrum and ever breast Fed their children born in the Last 24 Months

	GRAD Only 155 cases	ENGINE/GRAD 136 cases	All 291 cases
Feeding child colostrum	93.5	94.1	93.8
Ever breastfed child	97.4	97.8	97.3

Source: GRAD IR Assessment 2016 Survey

Another important indicator of proper nutritional practice is how soon mothers breastfeed their children after birth. Scientifically, it is advisable that newborn children should be breastfeed within one hour after birth.

Those who responded that they have breastfed their children (284 cases) were asked the time they started breastfeeding their child after birth. As indicated in Table 3.58, 90.2% in

ENGINE/GRAD woredas and 69.5% HHs in GRAD only woredas responded they have breastfed their children within one hour after birth. The remaining 19.0% and 1.8% of these mothers indicated that they breastfed their children within 1 - 24 hours and longer than 24 hours after birth, respectively.

Concurrent to the quantitative study, FGDs conducted with women showed that a majority of women in all implementation areas reported that they fed colostrum to newborn and continued to feed only breast milk until the child reaches six months.

Table 3.58: Percentage distribution of HHs by how soon they put their children Born in the last 24 months to the breast

First Time Breastfed After Birth	GRAD Only 151 cases	ENGINE/GRAD 133 cases	All 284 Cases
Less than one hour	69.5	90.2	79.2
Greater than 1 hour and less than 24 hours	29.1	7.5	19.0
Greater than 24 hours/1 Day	1.3	2.3	1.8

Source: GRAD IR Assessment 2016 Survey

It is also recommended that children at the age of six months should start taking complementary food in solid or semi-solid form in addition to breast milk. Hence, mothers who have children born within the last 24 months were asked if they have started giving their children complementary foods. Some 62.5% (182 respondents) reported that their child has consumed food or drinks other than breast milk. These 182 respondents were further asked the time at which they fed their children anything other than breast milk. As indicated in Table 3.59, about 79.1% of the surveyed mothers with children under the age of 24 months indicated that their children have started complementary foods at six months in addition to breast milk. On the contrary, about 12% of the mothers reported that their children started complementary foods at the age of 7 months or older.

Table 3.59: Percentage Distribution of Months When Child was first fed With Anything other than breast milk

Months	GRAD Only 91 cases	ENGINE/GRAD 91 cases	All 182 cases
0-2	6.6	4.4	5.5
3 to 5	5.5	1.1	3.3
6	79.1	79.1	79.1
7 and older	8.8	15.4	12.0

Source: GRAD IR Assessment 2016 Survey

Optimal infant feeding practices such as early initiation of breast feeding and exclusive breast feeding are crucial for the health and nutritional status of the infant as well as for the mother especially for the first six months. In view of this fact, mothers with infants aged less than six months (102 cases, 66 GRAD only while 36 ENGINE /GRAD) were asked about their breast feeding practice.

The finding indicated that about 63.6% of the infants in GRAD only targeted HHs were breastfed in the last 24 hours, whereas, 86.1% of the infants in GRAD/ENGINE HHs were breastfed in the last 24 hours. In GRAD only HHs, about 5.9% of infants were also breastfed by other woman or milk from other woman since the preceding day. However, about 10.8% of infants have consumed any other liquid besides ORS, syrups and vitamins (see Table 3.60).

Table 3.60: Percentage Distribution in Child Feeding Practices in those HHs with children in the age of 0-5 Months

Child feeding practice	GRAD Only 66 cases	ENGINE/GRAD 36 cases	All 102 cases
Breastfed child since yesterday	63.6	86.1	71.6
Breastfed by other woman or milk from other woman since yesterday	7.6	2.8	5.9
Consume any liquid except ORS, syrups and vitamins since yesterday	12.1	8.3	10.8

Source: GRAD IR Assessment 2016 Survey

C. Minimum Meal Frequency (MMF)

Minimum meal frequency (MMF) is one of the indicators of feeding practices and nutritional status of children. Hence, there was an assessment of the frequency of meals taken by the children in a day. For this purpose, MMF, as defined by WHO, was used as a standard to measure whether the children were getting the right foods at the right times. As per the definition of WHO, MMF refers to the practice of giving food twice for breastfed infants aged 6-8 months, three times for breastfed children aged 9-23 months and four times for non-breastfed children aged 6-23 months.

Analysis on minimum meal frequency was conducted for the children 6 months and older. In the assessment, 189 children were reported to be age of between 6 and 23 months. Of these children, 89 cases are in GRAD only woredas and 100 cases in ENGINE/ GRAD woredas (see Table 3.61).

Table 3.61: Distribution of Number of Sampled Children aged between 6 and 23 months in GRAD only and ENGINE/GRAD Areas

Age of Children (in month)	GRAD only	ENGINE/ GRAD	All
6-8	16	13	29
9-23	73	87	160
Total	89	100	189

Source: GRAD IR Assessment 2016 Survey

Accordingly, the assessment found that 65.5% of children at the age of 6-8 months and 80.6% of those in the age of 9-23 months have achieved Minimum Meal Frequency as per the above definition. The study also indicated that 78.3% of all children (6-23 months old) in the sampled HHs have achieved the required minimum daily meal frequency (see Table 3.62).

Table 3.62: Percentage of Children who have been fed with the Minimum Number of Meals per Day, by age category

Age category (in month)	GRAD only	ENGINE /GRAD	All
6-8	68.8	61.5	65.5
9-23	83.6	78.2	80.6
Total	80.9	76.0	78.3

Source: GRAD IR Assessment 2016 Survey

The survey also examined difference in achievement of MMF between sampled children in GRAD only and ENGINE/GRAD intervention areas. The results showed that in the ENGINE/GRAD woredas, 76.0% of the children (6-23 months old) have achieved Minimum Meal frequency; whereas 80.9% of the children in HHs in GRAD only woredas have achieved the MMF.

D. Minimum Dietary Diversity

Minimum Dietary Diversity (MDD) is another indicator of infant and young child feeding practices. According to WHO, MDD refers to the proportion of children 6–23 months of age who receive foods from four or more food groups. For analytical simplicity, all the relevant food items were re-categorized into seven food groups and the diversity was examined based on intake of these food groups (for details refer Annex 1 Table 7).

A comparative analysis of HHs in GRAD only and ENGINE/GRAD woredas showed differences in the proportion of children achieving MDD. As indicated in Table 3.63 below, 60.7% of children in GRAD only households have consumed at least four types of food items in the previous day prior to the survey, which is an indication of MDD achievement. On the other hand, 73.0% of those children in the ENGINE/GRAD woredas have achieved MDD. Overall, 67.2% of all children in sample HHs with the age of 6–23 months have achieved the MDD.

Table 3.63: Percentage of infant Minimum Dietary Diversity achievement

Number of Food Items Consumed	GRAD Only	ENGINE/GRAD	All
3 or Less	39.3	27.0	32.8
4 or More	60.7	73.0	67.2

Source: GRAD IR Assessment 2016 Survey

E. Minimum Acceptable Diet (MAD)

Another strong indicator for the assessment of feeding practice for youth and young children is Minimum Acceptable Diet (MAD). This refers to a composite indicator calculated as the proportion of breastfed children aged 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day. Accordingly, mothers in the sample HHs with children aged 6-23 months were asked about the frequency of meals ate by the children during the previous day. The findings, presented in Table 3.64 indicate that 51.7% and 56.0% of the children in GRAD only and ENGINE/GRAD areas, respectively, achieved at least the Minimum Acceptable Diet.

Table 3.64: Percentage of children who achieved MAD

Intervention Woredas	Percent
GRAD only	51.7
ENGINE/GRAD	56.0
All	54.0

Source: GRAD IR Assessment 2016 Survey

F. Women Dietary Diversity (WDD)

Women should be provided with varieties of nutritious foods, as it is essential for them and their children's health. The survey documented women's dietary diversity. In order to calculate WDD, the recommendation in "Guidelines for Measuring Household and Individual Dietary Diversity" (Kennedy 2011) was used. The guideline recommends taking 13 food groups out of the 16 in the questionnaire and groups them into 9 categories. As per the recommendation, the 13 relevant food groups in the questionnaire used for the present survey are re-categorized into nine (for details see Annex 1 Table 8).

There are no established cut-off points in terms of number of food groups to indicate adequate or inadequate dietary diversity for WDDS and thus to use mean score or distribution of scores for analytical purposes (Kennedy 2011).

Of the 815 HHs interviewed in the survey, 81.0% (660 HHs) have eligible women members aged between 16 and 49 years. Therefore, the study assessed the dietary habits of these relevant women (660 cases). Accordingly, the mean number of food groups consumed was found to be 3.98. However, the mean number of food groups consumed varied by intervention area; in ENGINE/GRAD areas women consumed more food groups (4.17) than those women in GRAD only areas (3.81) (see Table 3.65). Moreover, the survey disclosed that there is difference in mean number of food groups consumed by sample women among intervention areas of the GRAD implementing partners.

Table 3.65: Distribution of Mean number of food groups consumed by Women in IP and GRAD only and ENGINE/GRAD areas

Implementing Partners	Mean No of Food Groups Consumed
CARE	5.79
CRS/MCS	4.19
REST	3.39
ORDA	4.15
ASE	3.27
GRAD only	3.81
ENGINE /GRAD	4.17
All	3.98

Source: GRAD IR Assessment 2016 Survey

Folate/iron Supplement Intake during Pregnancy

The study also assessed the folate/iron supplement intake during pregnancy of women. This analysis was conducted only for 217 HHs having a pregnant woman at the time of survey or in the last 24 months prior to date of the survey. These HHs accounted for 26.6% out of the total 815 HHs surveyed in the assessment. The results, presented in Table 3.66, show that out of the 26.6% of HHs with pregnant women (currently/in the last two years) 87.1% reported the women took folate/iron supplement.

Table 3.66: Supplement Intake of Pregnant Women (in %)

	%
HHs with pregnant women currently/last two years	26.6
Pregnant woman who took folate/iron supplement	87.1*

* GRAD only (87.4%), ENGINE/ GRAD/ (86.7%)

Source: GRAD IR Assessment 2016 Survey

An attempt was made to see if the supplement intake varied by intervention area. However, as the above table indicates there is almost no difference in percentage of pregnant women

who took folate/iron supplement in GRAD only (87.4%) and ENGINE/GRAD (86.7%) intervention area.

G. Production and Consumption of Nutritious Foods

Home gardening is an important source of household nutrition in rural areas. GRAD supports households to install home gardens and practice poultry production for facilitating access to nutritious foods at home and also to supplement HH income.

Table 3.67 presents the results regarding own sourcing of nutritious foods. The data elucidated that 52.3% of the HHs practiced traditional poultry production, 45.5% practiced traditional home gardening to grow vegetables, and close to one-third (34.6%) practiced improved poultry production¹². On the other hand, small percentages of HHs adopted perma-gardens or keyhole gardens and OFSP production, 8.1% and 8.2%, respectively.

A comparison of the HHs under different implementing partners shows that traditional poultry production is practiced by most of the HHs under four IPs. HHs under ASE mainly practiced traditional home gardening (47.7%) to grow vegetables. A large proportion of HHs that practiced perma-garden/keyhole garden and OFSP production were found to be in areas where CARE operates. Given the higher proportion of HHs (43.3%) under CARE who received training on OFSP production and utilization it is not surprising that relatively higher percentage of HHs planted OFSP in the areas where CARE is the implementing partner.

Table 3.67: Percentage Distribution in Engagement in Production of Own Source of Foods by IP

Type of Practices	CARE	CRS/MCS	REST	ORDA	ASE	All
Practice traditional home garden with GRAD support	50.4	35.7	44.2	48.8	47.7	45.5
Practice Perma garden or keyhole garden	14.4	5.4	9.4	4.8	8.1	8.1
Ever used OFSP for household consumption	33.3	7.4	32.6	5.2	11.2	19.5
Get any education/training on OFSP	43.3	18.9	36.3	7.1	13.5	24.7
Planted OFSP at back yard garden	28.3	5.7	5.5	1.9	7.9	8.2
Traditional poultry due to GRAD	70.3	41.2	59.6	50.0	25.0	52.3
Practice improved poultry production	47.8	4.4	52.6	30.0	12.5	34.6

Source: GRAD IR Assessment 2016 Survey

¹²In the assessment, improved poultry production implies practice of rearing improved or modern hybrid or local chickens by kept them in a pen.

Own source of food was compared between GRAD only and ENGINE/GRAD areas and results are presented in Table 3.68. It was found that traditional poultry production was practiced in both GRAD only and ENGINE/GRAD areas. However, the percentage of HHs who practiced traditional poultry is greater in GRAD only areas than ENGINE/GRAD intervention areas; 56.2% for GRAD only and 47.9% for ENGINE/GRAD areas. Similarly, relatively higher percentage of HHs in both GRAD only and ENGINE/GRAD areas reported that they practiced traditional home gardening to grow vegetables. However, more HHs practiced traditional home gardening in ENGINE/GRAD areas than in GRAD only areas.

Table 3.68: Percentage Distribution in Engagement in Own Source of food, by GRAD only and ENGINE/GRAD Areas

Own Source of Nutritious foods	GRAD only	ENGINE/GRAD
Practice traditional home garden	43.6	47.5
Practice perma garden or keyhole garden	8.1	8.0
Ever use OFSP for household consumption	27.6	10.7
Get any education/training on OFSP	31.8	16.9
Planted OFSP at your back yard garden	7.8	8.7
Traditional poultry (new or expanded)	56.2	47.9
Practice improved poultry production	41.0	27.6

Source: GRAD IR Assessment 2016 Survey

The survey also assessed for what purposes GRAD HHs use the product from their poultry and gardening activities. As presented in table 3.69 below, a significant number of HHs used their products both for purpose of income generation as well as HH consumption.

Table 3.69: Percentage Distribution in Purpose of Gardening and Poultry Production

Types of Activities	GRAD only			ENGINE/GRAD		
	Income Generating	HH consumption	Both	Income generating	HH consumption	Both
Traditional gardening	0.0	18.3	81.7	4.4	31.5	64.1
Perma-garden	0.0	9.4	90.6	6.7	13.3	80.0
Traditional poultry	3.0	1.3	95.8	13.3	13.8	72.9
Improved poultry	4.7	1.2	94.2	15.2	11.4	73.3

Source: GRAD IR Assessment 2016 Survey

The HHs engaged in production of nutritious foods were asked the kind of support they received. Accordingly, most of the HHs (46.3%) who practiced traditional gardening for growing vegetables reported that they received garden demonstration training while only 5.5% reported that they received support to purchase inputs. Close to one-third (33.0%)

reported that they received both training and financial support to buy inputs. Only 15% of those who practiced traditional gardening reported no support of any kind. Among those HHs that practiced perma-garden it was found that 21% received training, 8.1% received input support¹³, 66.1% received both training and financial support, whereas 4.8% reported not receiving support of any kind.

Almost half of the HHs (41.9%) that practiced traditional gardening and perma-garden reported receiving training. Less than a quarter (18.2%) reported receiving support to purchase inputs while slightly less than one third (32.1%) reported receiving both. For those HHs who were engaged in improved poultry it was found that the percentage of HHs who received either training or financial support to buy inputs was equal. Most of the HHs (42.4%) received both while only 4.7% did not receive support. (For detail on kind of support obtained by HHs under different IP, see Annex 1 Table 3).

Table 3.70: Percentage Distribution of HHs who engaged in gardening and poultry production by kind of support obtained

Type of Activities	Demonstration /Training	Input Support	Both	No support received
Traditional garden	46.3%	5.5%	33.0%	15.2%
Perma-garden produce	21.0%	8.1%	66.1%	4.8%
Traditional poultry	41.9%	18.2%	32.1%	7.9%
Improved poultry	26.4%	26.4%	42.4%	4.7%

Source: GRAD IR Assessment 2016 Survey

The study also assessed the use of inputs for poultry production. A relatively higher proportion of HHs (88.3%) used/built separate chicken house/pen. Improved poultry feed and vaccinations were inputs used by slightly fewer HHs. Expert follow-up and support were on average the least used of all inputs. A comparison of use of inputs by intervention areas shows that the use of separate house/pen was almost the same for GRAD only and ENGINE/GRAD areas, 88.2% and 88.5% respectively. However, there were differences between the intervention areas in the percentage of HHs that used inputs. For instance, higher percentage of HHs (76%) in GRAD only areas used improved poultry feed than ENGINE/GRAD areas while a relatively higher percentage of HHs in ENGINE/GRAD areas used both chicken vaccination and expert follow-up and support (see Table 3.71 below).

Table 3.71: Use of Inputs for Poultry Practice, by GRAD only and ENGINE/GRAD intervention areas

	GRAD only	ENGINE / GRAD	All
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¹³In the case of traditional garden and perma-garden, this refers to seed support. For poultry, it took the form of support to purchase improved/local chicken through loan access from VESA or MFI

Have separate chicken home	88.2%	88.5%	88.3%
Use of improved poultry feed	76.0%	65.7%	72.1%
Get chicken vaccination	61.8%	88.6%	72%
Get expert follow up and support	47.6%	72.4%	57.1%

Source: GRAD IR Assessment 2016 Survey

Use of inputs for poultry practice was analyzed by intervention areas of IPs (see Table 3.72). It was found that use of separate chicken house/pen was higher among HHs under CARE and ORDA. However, the use of separate chicken house/pen was much lower among HHs where ASE operates as only half were found to use it. The use of improved poultry feed was higher among HHs under CARE (92.7%), whereas it was very low among HHs under ORDA where only 50.8% of the HHs used improved poultry feed. A relatively higher percentage (90.9%) of HHs from ASE areas had their chickens vaccinated while a relatively smaller percentage of HHs (60%) under CRS/MCS received chicken vaccination. Last but not least, expert follow-up and support was higher for HHs under CARE (87.3%) while poor utilization of expert follow-up and support was observed among HHs in ASE areas where only one third (36.4%) of the HHs reported using it. In general, the use of all inputs was found to be higher among HHs under CARE.

Table 3.72: Use of Inputs for Poultry Practice, by IP

Practices and Inputs	CARE	CRS/MCS	REST	ORDA	ASE
Have separate chicken house/pen	92.7%	60%	88.6%	92.1%	50%
Use of improved poultry feed	92.7%	80%	72.5%	50.8%	81.8%
Get chicken vaccination	85.5%	60%	58.9%	87.3%	90.9%
Get expert follow-up and support	87.3%	60%	41.8%	68.3%	36.4%

Source: GRAD IR Assessment 2016 Survey

H. Hand Washing

Promoting better hygiene practices is among the activities GRAD and ENGINE have carried out. In line with this, the study assessed the hand-washing practices of sample HHs. The major focus of the assessment is the time the respondents (women in HHs) wash their hands. In the interview, the enumerators did not prompt the respondents in posing the questions related to hand washing. Rather, the respondents were asked to list down /mention key times they wash their hands.

In nearly all (97.2%) of the respondents stated that they wash their hands before eating. 87.4% of the respondents stated that they wash their hands before preparing food and 75.7% of the respondents reported washing their hands after eating. However, the study

noticed that most of the participants did not mention washing their hands after cleaning a toilet (34.5%) and after cleaning a child who has defecated (38.2%). A comparison of hand washing practices in GRAD only and ENGINE/GRAD areas shows there was no difference as to when the respondents wash their hands. More respondents in ENGINE/GRAD areas than in GRAD only areas wash their hands before preparing food and after eating (see Table 3.73 below).

Table 3.73: Timing at which respondents wash their hands, by GRAD only and ENGINE/GRAD Areas

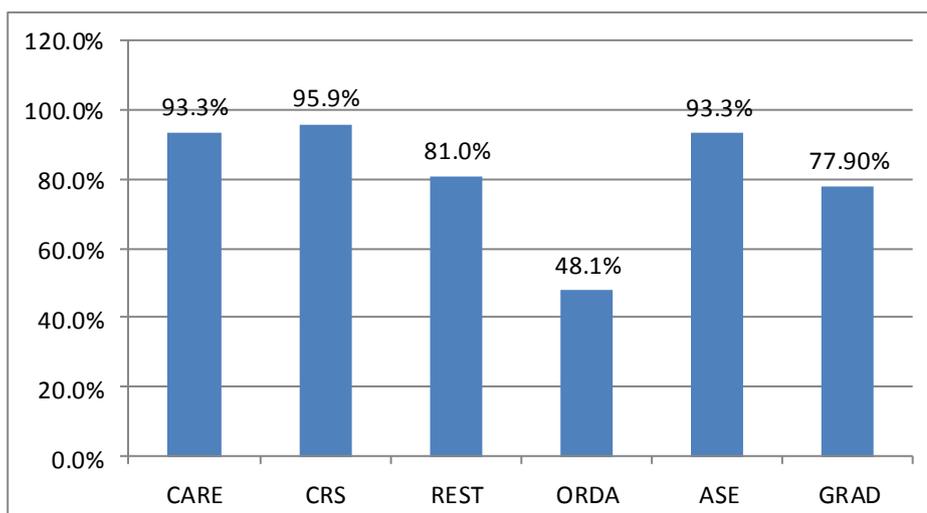
Key hand washing times	GRAD only	ENGINE/GRAD	All
Before eating	97.6%	96.7%	97.2%
Before preparing food	84.2%	90.8%	87.4%
After eating	70.8%	81.1%	75.7%
After using toilet	62.7%	63.7%	63.2%
When dirt is visible	50.5%	70.3%	60.0%
Before feeding child	51.7%	55.0%	53.3%
When I am reminded to do so	35.4%	47.6%	41.2%
After cleaning a child who has defecated	36.6%	39.9%	38.2%
After cleaning a toilet	33.3%	35.8%	34.5%

Source: GRAD IR Assessment 2016 Survey

3.2.3. Climate change adaptation (CCA) improved

Climate change is a major source of vulnerability to rural livelihoods. In line with this, the study observed that most (77.9%) respondents think climate change is occurring in their locality. A comparison of awareness of climate change by IPs shows that CRS/MCS, CARE and ASE areas had the largest number of respondents who reported climate change occurrence in their locality. A relatively smaller percentage of respondents reporting awareness of climate change were found in areas where ORDA operates with only 48.1% of the respondents reporting occurrence of climate change (see Figure 3.1).

Figure 3.1: Percentage of HHs that reported awareness of occurrence of climate change



Source: GRAD IR Assessment 2016 Survey

Those respondents who perceived the occurrence of climate change in their localities were further asked to indicate the manner in which they perceived the climate change. As depicted in Table 3.74 below, the majority of respondents outlined change in rainfall amount (79.5%), increase in temperature (66.7%), and variability in rainfall (52%) as climate change manifestations. In areas where ORDA operates, an increase in temperature (70.3%) was reported as major manifestation of climate change. Although they were not frequently cited, such events as increase in occurrence of animal and plant diseases as well as incidence of floods were reported by respondents as manifestations of occurrence of climate change in their areas.

Through FGDs with male household heads an attempt was made to better understand the manner in which climate change is manifested in GRAD implementation areas. Accordingly, FGD participants in REST indicated severe drought and high temperature, and in ORDA and ASE indicated increased temperature, reduced rainfall and flood. Participants in CARE areas reported excessive rain, drought, and flood. Finally, in CRS/MCS vicinities soil erosion, landslide, flood, and drought are reported as incidences showing occurrence of climate change.

Table 3.74: Manner in which climate change occurred per IPs

Manifestation of Climate Change	CARE	CRS/MCS	REST	ORDA	ASE	All
Change in rainfall amount	81.3	91.4	82.8	47.5	90.4	79.5
variability in rainfall	47.3	73.3	45.7	47.5	50.6	52.0
Increase in temperature	62.5	77.6	60.6	70.3	68.7	66.7
Increase of animal and plant disease	30.4	53.4	28.5	7.9	36.1	31.1
Increase in occurrence of floods	35.7	52.6	14.0	5.9	60.2	29.7

Source: GRAD IR Assessment 2016 Survey

HHs have adopted different strategies to adapt to climate change with support from the project. Accordingly, the study identified various strategies being adopted by the sample HHs. As presented in Table 3.75, the three major strategies are starting or increasing savings rates (64.2% of cases) using short-season or drought resistant crops or varieties (55.6% of cases), and practicing watershed improvement activities (45.4% of cases). Subscribing to weather index insurance was reported to be adaptation mechanism employed by HHs in areas where REST and ORDA operate.

The qualitative data collected from MHHs on mitigation measures indicated planting trees as being undertaken in all implementation areas. As an adaptation mechanism, extensive activity on development of supplemental irrigation was employed in REST implementation areas.

Table 3.75: Climate change adaptation measures used by HHs, by IP

Adaptation Measures	CARE	CRS/MCS	REST	ORDA	ASE	All
Use short-season or drought resistant crops or varieties	78.8%	57.6%	70.9%	29.2%	37.2%	55.6%
Diversify into less risky livelihoods activities	79.2%	21.5%	52.2%	18.7%	18.2%	39.3%
Subscribe to weather index insurance*			27.5%	1.0%		
Start using supplemental irrigation	10.0%	29.2%	40.1%	16.2%	24.4%	26.1%
Adopt use of fuel efficient stoves	16.7%	26.7%	36.7%	33.8%	9.1%	28.5%
Watershed improvements	65.0%	33.1%	55.0%	34.8%	31.8%	45.4%
Start savings or increase savings rates	67.5%	37.5%	89.7%	60.5%	27.0%	64.2%
Use improved feed technologies	57.5%	25.8%	49.5%	29.0%	20.2%	38.7%

***Only REST and ORDA**

Source: GRAD IR Assessment 2016 Survey

As GRAD encourages its beneficiaries to adopt various climate change adaptation strategies, the study also attempted to get information in this regard. Accordingly, the study detected the contribution of GRAD in adapting various climate change adaptation mechanisms as very significant. Out of those HHs who reported practicing savings as a climate adaptation strategy, 91.2% reported that they started savings or increased saving rates as adaptation mechanism as a result of the project. Similarly, out of those HHs that reported using short-season or drought resistant crops or varieties, 81.1% reported to use such mechanism as the result of GRAD and out of those HHs who reported improving watershed as an adaptation mechanism 72.8% reported to use such mechanism as the result of the project. (See Table

3.76 below for detailed climate adaptation strategies adopted by the HHs as result of GRAD).

Table 3.76: Climate change adaptation measures used by HHs as a result of GRAD

Adaptation Measures	%
Use short-season or drought resistant crops or varieties	81.1
Diversify into less risky livelihoods activities	91.4
Subscribe to weather index insurance [Only REST and ORDA]	78.0
Start using supplemental irrigation	70.0
Adopt use of fuel efficient stoves	74.7
Watershed improvements	72.8
Start savings or increase savings rates	91.2
Use improved feed technologies	88.3

Source: GRAD IR Assessment 2016 Survey

3.2.4. Supplemental Indicators Related To Drought and Recovery

Experience of Shock

The study found that the majority of the HHs faced shock in the past 12 months; only 36.8% of the HHs reported not experiencing any shock. However, the study observed that the extent of shock experienced by sample HHs is different. Only 13.7% of those who reported the experience of shock reported that they experienced only one of the shocks while a significant majority of (49.4%) HHs who reported experiencing shock indicated they experienced both weather and economic shocks.

A separate assessment on the number of HHs that experienced weather shock in the past 12 months was made. Accordingly, the majority of (57.0%) the HHs reported experiencing a weather shock in the past 12 months.

Table 3.77: Percent of HHs Experienced Weather Shock in the Past 12 Months, by IP and HH Type

IP	% of HHs Experienced weather shocks
CARE	82.5
CRS	82.8
REST	56.8
ORDA	20.5
ASE	74.2

All	57.0
MHH	58.9
FHH	54.1

Source: GRAD IR Assessment 2016 Survey

As the above table illustrates, not all sample HHs experienced similar shock. A variation was observed among implementation areas. For instance, the great majority of HHs in CRS/MCS and CARE areas experienced weather shock, 82.8% and 82.5% respectively. The second largest percentage of HHs that experienced a weather shock was found in areas where ASE operates, with 74.2% HHs reporting. ORDA had the smallest/lowest percentage (20.5%) of HHs who reported only experiencing a weather shock.

Those respondents who reported experiencing weather shock were further asked to indicate the type of shock. The type of weather shock experienced by most of the HHs was drought followed by excessive rains and flood. According to the data, landside/erosion are the least experienced type of weather shock, followed by frost and hail.

Table 3.78: Type of Weather Shock Households Experienced, percentage by IP and Total

Type of Shocks	CARE	CRS/MCS	REST	ORDA	ASE	All
Excessive rain	76.8	86.1	11	11.6	95.5	53.4
Too little rain/drought	69.7	87.1	92.9	81.4	68.2	82.1
Frost/freezing rain/hail	5.1	19.8	12.3	20.9	25.8	15.1
Livestock/crop disease	32.3	49.5	47.7	48.8	36.4	43.3
Flood	61.6	72.3	21.9	9.3	86.4	49.4
Landslides/erosion	8.1	32.7	3.2	4.7	18.2	12.9

Source: GRAD IR Assessment 2016 Survey

Comparison of the type of weather shocks reported by implementing partner's shows different exposure, a high percentage (92.9%) of HHs in areas where REST operates reported experiencing drought followed by HHs in areas where CRS/MCS and ORDA operate (87.1% and 81.4% respectively). HHs in ASE, CRS/MCS, and CARE areas experienced relatively higher level of rain. Flood was found to be a problem in ASE areas as 86.4% of the HHs reported experiencing it. HHs in areas where ASE operates also suffered due to landslides/erosion (18.2%), REST operational areas experienced the least (3.2%) from landslides/erosion. Given the excessive rain and flood experienced in the ASE areas, it is not surprising that it suffered the most landslides/erosion. The study also found that in areas where CRS/MCS operates both excessive rain (86.1%) and too little rain (87.1%) were major types of weather related shock.

Assessment was also made regarding economic and other shocks in the past 12 months (see Table 3.79, below). Accordingly, more than half (55.8%) of the HHs reported experiencing economic and other shocks in the past 12 months.

Table 3.79: Percentage of HHs Experienced Economic and other Shocks in the Past 12 Months, by IP and HH Type

IP	% of HHs Experienced Economic Shocks
CARE	78.3
CRS/MCS	82.8
REST	57.5
ORDA	15.7
ASE	77.5
All	55.8
MHH	56.3
FHH	55.0

Source: GRAD IR Assessment 2016 Survey

Similar to the differences in weather shocks, disparities were observed among IPs. Higher proportions of economic and other shocks were reported in CRS/MCS (82.8%), CARE (78.3%), and ASE (77.5%) areas. ORDA has lowest proportion (15.7%) of HHs that experienced economic/other shocks.

Those respondents who reported experiencing economic/other shocks in the past 12 months were further asked to provide the type of shock they experienced. Higher percentage (76.9%) of the HHs reported they experienced crop failure. The next most frequent responses were extreme increase in food prices (58.6%) and livestock death (31.3%). Loss of other significant assets and death of family members were also reported by HHs (17.9%) and crop failure was a major problem in areas where CARE operates (100% of HHs). Extreme increase in food prices (82.2%) and livestock death (53.5%) were major shocks reported at higher levels in CRS/MCS implementation areas than in other areas.

Table 3.80: Economic/Other Shock in the Past 12 Months, percentage by IP and Total*

Type of Shocks	CARE	CRS/MCS	REST	ORDA	ASE	All
Extreme increase in food prices	54.3	82.2	35.7	72.7	75.4	58.6
Crop failure	100	70.3	71.3	63.6	73.9	76.9
Livestock death	11.7	53.5	36.3	3	27.5	31.3
Loss of other significant asset	7.4	19.8	28	3	13	17.8
Loss of family members	0.0	5	2.5	0.0	4.3	2.6
Other economic shock	6.4	1	0.6	6.1	1.5	2.4

** Only HHs that have faced economic/other shock*

Source: GRAD IR Assessment 2016 Survey

It was also found that drought, flood, excessive rain, and livestock/crop disease are the most commonly reported type of weather-related shocks by both MHH and FHH. In addition, crop failure and extreme increase in food prices are two main economic shocks experienced by both types of HHs (see Table 3.81).

Table 3.81: Type of Shocks Faced in the last 12 months by Type of HHs

Types of Shock	HH Type	
	MHH	FHH
Excessive rains	59.8%	42.8%
Too little rain/drought	81.0%	84.4%
Frost/freezing rain/hail	15.6%	16.2%
Livestock/crop disease	42.7%	44.5%
Flood	50.8%	45.7%
Landslides/erosion	14.6%	9.8%
Extreme increase in food price	61.4%	54.5%
Crop failure	80.4%	71.6%
Livestock death	28.6%	36.4%
Loss of other significant asset	16.8%	19.3%
Loss of family member/s	3.9%	1.1%

Source: GRAD IR Assessment 2016 Survey

Livelihood Support

The study also assessed whether or not those HHs that experienced shocks received support to recover from the shocks. It was found that more than half (57.9%) of such HHs received support. The highest percentage (76%) of HHs that received the support came from areas where REST operates. The next highest percentage of HHs (72.5%) was found in areas where

the implementing partner is CARE followed by CRS/MCS where 66.7% of the HHs reported they had received support. Areas where ASE and ORDA are implementers had the lowest percentage of support recipients 11.8% and 18.5%, respectively (see Table 3.82 below).

Table 3.82: Percentage of HHs that received support for livelihood recovery, by IP and HH

Type	
IP	% of HHs Received support
CARE	72.5
CRS	66.7
REST	76.0
ORDA	18.5
ASE	11.8
All	57.9
MHH	54.2
FHH	63.9

Source: GRAD IR Assessment 2016 Survey

Those respondents who have received support for livelihood recovery were further asked to indicate the type of support they received (Table 3.83). The highest proportion (68.5%) of support received by HHs was food aid. The next was material aid (improved seed, animal feed, and water tankers) at 62.5%. The other types of support received include cash aid.

Material aid was received by high percentage of HHs in CARE areas while less than a quarter of HHs (20%) under ORDA reported receiving material aid. The highest proportion of (26.7%) HHs under ASE received cash aid, while HHs under CARE received the lowest (4.1%).

Table 3.83: Type of Support Received, Percentage by IP and Total

Type of Support	CARE	CRS/MCS	REST	ORDA	ASE	Total
Aid in Cash	4.1	27.8	42.1	30.0	66.7	29.5
Food aid	25.4	93	85.6	10.0	25	68.5
Material aid including improved seed, animal feed and water tanker	90.3	47.2	61.7	20.0	22.2	62.5

**'Other' excluded due to small number (15 cases)*

Source: GRAD IR Assessment 2016 Survey

GRAD was found to be the major source of support with the exception of food aid which was mainly distributed by the government. GRAD was a major source of support for emergency seed and cash aid. Other sources were reported though they make up a very

small percentage. For instance, other NGOs and CSOs are the third major (26.1%) source of cash aid next to GRAD (35.2%) and government (33%).

Table 3.84: Source of Support, percentage by Type of Support

Type of Support	GRAD	Gov't	Other NGO/CSO	Friends/relatives	Religious Organization
Aid in Cash	35.2	33.0	26.1	3.4	1.1
Food aid	30.1	48.5	17.5	0.5	3.4
Material aid(improved seed, animal feed and water tankers)	79.1	15.7	4.2	0.5	0.0

Source: GRAD IR Assessment 2016 Survey

Recovery

The study assessed the extent to which the households that received support think they have recovered or will recover to pre-shock conditions. Accordingly, for 48% of the HHs the possibility of getting back to their pre-shock condition is moderately likely, while 25.8% of the HHs thought complete recovery is possible. Another 25.8% of HHs thought the possibility of getting back to pre-shock condition are slim. The study sought to assess if there are variations between MHHs and FHHs in the extent to which they think they get back to their pre-shock condition. Most MHHs (29.9%) reported they would recover completely while most FHHs (52.4 %) reported that the possibility of recovering is moderately likely (see Table 3.85).

Table 3.85: The Extent to which HHs think they will get back to pre-shock condition as a result of support received, percentage by HH type

Perceived Possibility of Recovery	MHH	FHH	All
Completely	29.9	20.2	25.8
Moderately	44.8	52.4	48
Slightly	25.3	26.6	25.8
Not at all	0.0	0.8	0.3

Source: GRAD IR Assessment 2016 Survey

Table 3.86: The extent to which households think they will get back to pre-shock condition as a result of support received, % by IP

Perceived Possibility of Recovery	CARE	CRS/MCS	REST	ORDA	ASE
Completely	60.8	8.3	15.8	30.0	22.2
Moderately	31.1	43.1	61.7	40.0	33.3
Slightly	8.1	47.2	22.6	30.0	44.4

Not at all	0.0	1.4	0.0	0.0	0.0
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Source: GRAD IR Assessment 2016 Survey

The extent to which HHs think recovery is possible was compared among the various implementing partners. The percentage of HHs that thinks they would get back completely was higher among HHs under CARE. In areas where REST operates most of the HHs (61.7%) reported it is moderately likely that they would recover. Hope of recovering is very low among HHs under CRS/MCS as 47.2% of the HHs reported that the chance of getting back to the pre-shock condition is slim. Moreover, 1.4% of the HHs under CRS/MCS reported getting back to pre-shock state was impossible.

3.2.5. Promote Aspiration for Graduation among Targeted PSNP HHs and Enhance Ability to Graduate

GRAD promotes graduation of beneficiaries by building their capacity through achieved development. In line with the major objective of GRAD, the study assessed sample HHs' PSNP status and the associated aspiration to graduate. Accordingly, the study indicated that out of the sample households 38.2% are current beneficiaries of PSNP. While 48% of the FHHs were in PSNP, 32% of the MHHs were in PSNP. Moreover, a higher percentage of HHs currently in PSNP were found in CRS/MCS (57.4%) and REST (50.9%) areas while a small percentage of HHs were found to be in PSNP in CARE operation areas.

Table 3.87: Percentage Distribution of HHs who are currently in PSNP

IP	% of HHs currently in PSNP
CARE	8.3
CRS	57.4
REST	50.9
ORDA	27.1
ASE	39.3
All	38.2
MHH	31.8
FHH	48.1

Source: GRAD IR Assessment 2016 Survey

Those HHs that were not in PSNP were further analyzed as to their graduation status. The results are presented in Table 3.88. It was found that 72.2% of HHs that are not currently beneficiaries of PSNP graduated from PSNP after joining GRAD while about one fourth (25%) graduated from PSNP before joining GRAD. Another 3 % HHs have never been in PSNP. This implies that about 17% of the GRAD HHs were not in PSNP when they joined the project.

A comparison of HHs under the various IPs shows that relatively higher proportion of HHs under CARE (96.4%), CRS/MCS (82.7%), and REST (81.3%) reported they graduated after joining GRAD. Compared to HHs in areas where CARE, CRS/MCS and REST operate, ORDA and ASE had more HHs that reported graduating before joining GRAD.

Table 3.88: Time of Graduation from PSNP among HHs currently not in the program, percentage by IP and Total

Time of Graduation	CARE	CRS/MCS	REST	ORDA	ASE	All
Before joining GRAD	3.6	17.3	11.2	48.4	42.6	24.9
After joining GRAD	96.4	82.7	81.3	49.7	53.7	72.2
Never been in PSNP	0.0	0.0	7.5	2.0	3.7	3.0

Source: GRAD IR Assessment 2016 Survey

Those HHs who graduated from PSNP after joining GRAD were asked about their readiness to graduate at the time of graduation. The study found that some 60% of those who graduated reported they felt they were ready. On the other hand, 37% of HHs that graduated from PSNP after joining GRAD reported that they still need PSNP support.

The study also measured when HHs currently in PSNP want to graduate. On average, 29% of such HHs aspires to graduate within the next two to five years, 27 % of the HHs aspires to graduate in the next two years and 21.2% of the HHs aspires to graduate in less than a year. Less than 10% (7.7%) of the HHs currently in PSNP do not want to graduate. During FGDs, male household heads indicated enabling and deterring factors for leaving and wanting to stay in PSNP. Accordingly, available support to engage in IGA and VC are reported as push factors that encourage HHs to graduate from PSNP. On the other hand, the recurrent shortage of rain and climate induced shocks are noted as a discouraging factors for HHs for wanting to stay in the PSNP.

A comparison between the time period MHHs and FHHs aspire to graduate shows that FHHs needed more time than MHHs; 32.5% of FHHs reported they want to graduate in the next three to five years, while 26.1% of MHHs reported the desire to graduate within the same period of time. Moreover, a higher percentage of FHHs (9.1%) reported not wanting to graduate than MHHs (6.4%).

Table 3.89: Time at which HHs aspire to graduate from PSNP, percentage by HH type and total

Aspiration time to graduation	MHH	FHH	All
Within two years	49.1	47.4	48.2
In the next 3 to 5 years	26.1	32.5	29.3
Never	6.4	9.1	7.7
Don't know	18.5	11	14.8

Source: GRAD IR Assessment 2016 Survey

Table 3.90: Time at which HHs aspires to graduate from PSNP, percentage by IPs

Aspiration time to graduation	CARE	CRS/MCS	REST	ORDA	ASE
Within two years	70.0	38.5	51.1	59.7	31.4
In the next 3 to 5 years	10.0	25.7	38.1	14.0	31.4
Never	10.0	8.6	5.0	14.0	5.7
Don't know	10.0	27.1	5.8	12.3	31.4

Source: GRAD IR Assessment 2016 Survey

A separate analysis of HHs under the various implementing partners was made to learn whether variations exist in the period of time within which HHs wish to graduate. It was observed that a higher proportion of HHs (47.4%) wish to graduate in less than a year. The percentage of HHs that wishes to graduate in the next two years was found to be higher in areas where CARE operates. It was also found that HHs in areas REST works want more years to graduate than HHs under other IPs. Although the percentage of HHs that wish to graduate quickly is much higher among ORDA, again a significant number of HHs (14%) under ORDA do not want to graduate in the near future.

Appendix A: Additional Tables

Table A.1: Percentage of HHs by Perceived Affordability of Agricultural inputs as perceived by HHs engaged in specific VC

VC	Agricultural inputs	Very affordable	Moderately affordable	Slightly affordable	Not affordable
Livestock	1. Effective Micro-organism /EM/Chemical	30.9%	53.7%	13.6%	1.9%
	2. Manual Chopper	53.3%	35.5%	8.0%	3.3%
	3. UMB [Urea Molasses Block]/ Molasses	45.5%	49.5%	4.4%	.7%
	4. Silage making	40.0%	31.4%	28.6%	0.0%
	5. Concentrate and industrial by-product feed	46.0%	42.7%	5.9%	5.3%
	6. Urea treatment	49.6%	42.4%	5.8%	2.2%
	7. Cut and carry system	61.4%	30.8%	6.6%	1.3%
	8. Planting improved forages	63.4%	30.6%	6.0%	0.0%
	9. Bokash	16.7%	50.0%	33.3%	0.0%
	10. Mineral	29.3%	43.9%	21.7%	5.1%
	11. Livestock drugs	48.8%	43.4%	6.4%	1.4%
Honey	1. Colony multiplication at HHS level	56.5%	34.8%	8.7%	0.0%
	2. low cost transitional hives	55.2%	34.5%	10.3%	0.0%
	3. modern bee hives	44.4%	33.3%	11.1%	11.1%
	4. Honey harvesting	59.4%	18.8%	18.8%	3.1%
	5. Shade/stand construction	54.3%	20.0%	17.1%	8.6%
	6. Bee colony transfer	59.1%	36.4%	4.5%	0.0%
Red Pepper	1. Organic fertilizer application	39.6%	41.7%	16.7%	2.1%
	2. Row planting	62.7%	35.3%	2.0%	0.0%
	3. Selection and use of good quality seeds	32.4%	50.0%	17.6%	0.0%
	4. Post harvest handling	66.7%	33.3%	0.0%	0.0%
	5. Agricultural tools	33.3%	58.3%	8.3%	0.0%
	6. Agro chemicals	36.1%	58.3%	5.6%	0.0%
Onion	1. Supplemental irrigation	46.9%	37.5%	14.1%	1.6%
	2. Improved seed Varieties	31.3%	33.8%	15.0%	20.0%
	3. Row planting	61.9%	33.3%	4.8%	0.0%
	4. Improved irrigation	35.7%	42.9%	0.0%	21.4%
	5. Furrow irrigation	37.5%	31.3%	9.4%	21.9%
	6. Fertilizer application	36.6%	27.7%	18.8%	16.8%
	7. Agricultural tools	39.5%	39.5%	17.1%	3.9%
	8. Agro chemicals	19.7%	42.6%	19.7%	18.0%
To ma	1. Supplemental irrigation	41.5%	43.9%	12.2%	2.4%

VC	Agricultural inputs	Very affordable	Moderately affordable	Slightly affordable	Not affordable
	2. Improved seed Varieties	35.0%	52.5%	7.5%	5.0%
	3. Row planting	67.4%	30.4%	2.2%	0.0%
	4. Improved irrigation	56.3%	31.3%	0.0%	12.5%
	5. Furrow irrigation	58.8%	17.6%	5.9%	17.6%
	6. Fertilizer application	31.6%	44.7%	15.8%	7.9%
	7. Agricultural tools	43.2%	32.4%	16.2%	8.1%
	8. Agro chemicals	40.0%	45.0%	10.0%	5.0%
	Malt Barely	1. Improved seeds	45.9%	29.7%	10.8%
2. Row planting		65.2%	26.1%	7.6%	1.1%
3. Fertilizer application		28.3%	38.4%	10.1%	23.2%
4. Agro chemicals		52.8%	22.6%	11.3%	13.2%
Potato	1. Improved seed	35.4%	35.4%	14.6%	14.6%
	2. Fertilizer application	35.8%	33.1%	16.2%	14.9%
	3. Supplemental irrigation	70.0%	21.7%	8.3%	0.0%
	4. Row planting	63.2%	30.1%	5.3%	1.5%
	5. DLS (Diffused Light Storage)	44.4%	52.8%	0.0%	2.8%
	6. Agricultural tools	44.6%	29.7%	17.8%	7.9%
	7. Agro chemicals	52.2%	23.9%	8.7%	15.2%
Pulses	1. Super Grain Bags	21.1%	47.4%	10.5%	21.1%
	2. Improved seeds	18.2%	47.0%	25.8%	9.1%
	3. Fertilizer application	10.1%	47.8%	30.4%	11.6%
	4. Agro chemicals	20.0%	51.4%	28.6%	0.0%

Table A. 2: Percentage of HHs by Perceived Quality of Agricultural inputs as perceived by HHs engaged in specific VC

VC	Agricultural inputs	High quality	Moderate quality	Poor quality
Livestock	1. Effective Micro-organism /EM/Chemical	86.4%	13.6%	0.0%
	2. Manual Chopper	71.3%	26.9%	1.8%
	3. UMB [Urea Molasses Block]/ Molasses	88.9%	11.1%	0.0%
	4. Silage making	65.7%	31.4%	2.9%
	5. Concentrate and industrial by-product feed	88.8%	10.9%	.3%
	6. Urea treatment	87.8%	11.5%	.7%
	7. Cut and carry system	74.3%	25.2%	.5%
	8. Planting improved forages	79.3%	20.2%	.5%

VC	Agricultural inputs	High quality	Moderate quality	Poor quality
	9. Bokash	83.3%	16.7%	0.0%
	10. Mineral	77.2%	22.8%	0.0%
	11. Livestock drugs	87.1%	12.7%	.2%
Honey	1. Colony multiplication at HHs level	65.2%	34.8%	0.0%
	2. low cost transitional hives	37.9%	62.1%	0.0%
	3. modern bee hives	83.3%	16.7%	0.0%
	4. Honey harvesting	59.4%	40.6%	0.0%
	5. Shade/stand construction	54.3%	42.9%	2.9%
	6. Bee colony transfer	73.9%	26.1%	0.0%
Red Pepper	1. Organic fertilizer application	89.6%	10.4%	0.0%
	2. Row planting	83.0%	13.2%	3.8%
	3. Selection and use of good quality seeds	82.4%	14.7%	2.9%
	4. Post-harvest handling	90.6%	9.4%	0.0%
	5. Agricultural tools	76.0%	24.0%	0.0%
	6. Agro chemicals	86.1%	13.9%	0.0%
Onion	1. Supplemental irrigation	59.4%	37.7%	2.9%
	2. Improved seed Varieties	75.9%	24.1%	0.0%
	3. Row planting	68.3%	28.7%	3.0%
	4. Improved irrigation	78.6%	21.4%	0.0%
	5. Furrow irrigation	78.4%	21.6%	0.0%
	6. Fertilizer application	86.1%	13.9%	0.0%
	7. Agricultural tools	63.8%	36.3%	0.0%
Tomato	8. Agro chemicals	72.1%	26.2%	1.6%
	1. Supplemental irrigation	70.7%	26.8%	2.4%
	2. Improved seed Varieties	75.0%	25.0%	0.0%
	3. Row planting	71.7%	28.3%	0.0%

VC	Agricultural inputs	High quality	Moderate quality	Poor quality
	4. Improved irrigation	87.5%	12.5%	0.0%
	5. Furrow irrigation	88.2%	11.8%	0.0%
	6. Fertilizer application	76.3%	23.7%	0.0%
	7. Agricultural tools	69.2%	30.8%	0.0%
	8. Agro chemicals	75.0%	25.0%	0.0%
Malt Barely	1. Improved seeds	87.4%	12.6%	0.0%
	2. Row planting	86.2%	13.8%	0.0%
	3. Fertilizer application	86.9%	13.1%	0.0%
	4. Agro chemicals	86.8%	13.2%	0.0%
Potato	1. Improved seed	85.5%	13.8%	.7%
	2. Fertilizer application	86.5%	13.5%	0.0%
	3. Supplemental irrigation	80.3%	19.7%	0.0%
	4. Row planting	80.9%	18.4%	.7%
	5. DLS (Diffused Light Storage)	80.0%	20.0%	0.0%
	6. Agricultural tools	70.9%	28.2%	.9%
	7. Agro chemicals	89.1%	10.9%	0.0%
Pulses	1. Super Grain Bags	94.7%	5.3%	0.0%
	2. Improved seeds	89.4%	10.6%	0.0%
	3. Fertilizer application	88.4%	11.6%	0.0%
	4. Agro chemicals	94.3%	5.7%	0.0%

Table A.3: Percentage of HHs that Obtained Support in gardening and poultry production by IP and support type

IP	Description	Demonstration /Training	Support	Both
CARE	Traditional Garden	46.3%	5.5%	33.0%
	Perma-garden produce	21.0%	8.1%	66.1%
	Traditional poultry	41.9%	18.2%	32.1%
	Improved poultry	26.4%	26.4%	42.4%
CRS/MCS	Traditional Garden	39.0%	0.0%	19.5%
	Perma-garden produce	16.7%	0.0%	83.3%
	Traditional poultry	76.6%	10.6%	10.6%
	Improved poultry	20.0%	0.0%	80.0%
REST	Traditional Garden	53.4%	3.4%	39.8%
	Perma-garden produce	8.0%	16.0%	76.0%
	Traditional poultry	23.5%	22.8%	53.1%
	Improved poultry	23.2%	28.9%	47.9%
ORDA	Traditional Garden	50.0%	10.8%	29.4%
	Perma-garden produce	40.0%	0.0%	60.0%
	Traditional poultry	53.8%	14.4%	18.3%
	Improved poultry	41.3%	12.7%	36.5%
ASE	Traditional Garden	38.1%	11.9%	11.9%
	Perma-garden produce	42.9%	0.0%	28.6%
	Traditional poultry	45.5%	18.2%	13.6%
	Improved poultry	9.1%	18.2%	9.1%

Table A. 4: GRAD only and ENGINE /GRAD Intervention Woredas Covered in the Assessment

GRAD only Woredas	ENGINE /GRAD Woredas
Ende Mekoni	Lay Gayint
Ofla	Libokemekem
Alamata	Arsi Negelle
Raya Azebo	ATJK(Adami Tulu)
Shala	Loka Abaya
Zeway Dugda	Meskan
Mareko	
Shebedino	

Table A. 5: Distribution of Sampled HHs with Child under 24 months old among the Assessment Woredas

Sampled Assessment Woredas	# of HHs with child under 24 months old	Percent
Ende Mekoni	39	13.4
Ofla	36	12.4
Alamata	24	8.2
Raya Azebo	5	1.7
Lay Gayint	37	12.7
Libokemekem	38	13.1
Arsi Negelle	8	2.7
Shala	13	4.5
ATJK(Adami Tulu)	12	4.1
Zeway Dugda	12	4.1
Loka Abaya	18	6.2
Shebedino	14	4.8
Mareko	12	4.1
Meskan	23	7.9
Total	291	100.0

Table A.6: Summary Result on Mean Number of Food Groups Consumed by Surveyed Women across Selected Intervention Woredas

	Intervention Woredas	Mean # of food groups consumed by Surveyed Women
GRAD only	Shebedino	6.19
	Shala	4.41
	Zeway Dugda	3.93
	Ende Mekoni	3.92
	Mareko	3.44
	Raya Azebo	3.23
	Ofla	3.13
	Alamata	3.06
ENGINE /GRAD	Loka Abaya	5.43
	Lay Gayint	4.61
	Arsi Negelle	4.41
	ATJK(Adami Tulu)	4.00
	Libokemekem	3.80
	Meskan	3.17

Table A. 7: Summary of Food Groups for Children

Food Group	Question number(s)¹⁴
Grains, roots and tubers	1,2
Legumes and nuts	12
Dairy products (milk, yogurt, cheese)	13
Flesh foods (meat, fish, poultry and liver/organ meats)	8,9,10
Eggs	11
Vitamin-A rich fruits and vegetables	3,4,5,6
Other fruits and vegetables	7

Source: WHO 2010

Table A. 8: Summary of Food Groups For Women

No.	Food Group	Question number(s)
1.	Starchy staples	1, 2
2.	Dark green leafy vegetables	6
3.	Other vitamin A rich fruits and vegetables	3,4, 5
4.	Other fruits and vegetables	7
5.	Organ meat	8
6.	Meat and fish	9, 10
7.	Eggs	11
8.	Legumes, nuts and seeds	12
9.	Milk and milk products	13

Source: Kennedy 2011

¹⁴ The manual recommends that a specific food group will be recorded as consumed if the respondent reports consumption of any one of the sub-items in the category.

Appendix B: 2016 IR Assessment – Indicator List

Result 1: Enhanced livelihood options of chronically food insecure Households

Intermediate Results	Refined indicators
<p>IR 1.1: On- and off-farm economic opportunities, inclusive value chains and market access for targeted HHS stimulated</p>	<p><i>Economic Activities and Income</i></p> <ol style="list-style-type: none"> 1. % of HHs that are engaged¹⁵ in at least one VC (including by VC type¹⁶ and whether financing came from MFI, RuSACCO, Union, VESA, or other source) 2. Average annual profits from new/strengthened VC engagement per HH by VC 3. % of HHs who have adopted at least one new IGA since the start of GRAD 4. % of HHs engaged in the following major IGAs <ol style="list-style-type: none"> a. Petty trade (including of grain) b. Vegetable production and sales c. Poultry production and sales d. Other livestock (non VC) e. Retail (including shops, restaurants, beverage, micro-franchise) f. Donkey/horse cart g. Trade (carpentry, etc.) or handicrafts h. Other 5. Average net income from new/strengthened IGAs per year by IGA type 6. Average total HH annual income from new VCs and IGAs. 7. % of HHs that have completed more than one round/cycle of their VC since they joined GRAD 8. Value of incremental sales of crop, vegetables and animal products calculated as follows: <ul style="list-style-type: none"> ➤ Total value of product sales this year minus total value of product sales on year before enrollment in project (as recalled by respondent) 9. Gross margin per production unit of selected product (crops, vegetables and animal products) calculated as follows: <ul style="list-style-type: none"> ➤ Total value of product sales minus total value of purchase input costs divided by production unit. <p>IMPORTANT – THE ANALYSIS SHOULD BE ABLE TO GENERATE THE STATISTIC “% OF HHs THAT IS ENGAGED IN AT LEAST ONE VC, ADOPTED AT LEAST ONE NEW IGA, <u>AND</u> INCREASED ANNUAL INCOME BY AT LEAST \$365”.</p> <p><i>Access to Market</i></p> <ol style="list-style-type: none"> 1. % of HHs who are members of a FEMA 2. % of HHs selling their produce through FEMAs, cooperatives, or other

¹⁵ For the HH to be "engaged in a VC" it should be investing capital, adopting improved production practices, cooperating with other producers in FEMAs or coops, and seeking external markets (although can sell in local spot market if it pays more).

¹⁶ Livestock fattening, pulses, honey, malt barley, and vegetables (i.e. tomato, potato, red pepper, onion)

	<p>aggregators (by VC)</p> <ol style="list-style-type: none"> 3. % of those HHs that have sold products via the same aggregation point more than once 4. % of HHs who believe the price they are paid for their products when selling through aggregators is fair/reflects the market value <p>Access to agricultural inputs</p> <ol style="list-style-type: none"> 1. Type and value of agricultural inputs used per HH per IGA/VC 2. Sources of inputs (location and ownership type) 3. Perceived affordability of inputs 4. Perceived availability of inputs 5. Perceived quality of inputs
IR 1.2: An inclusive financial sector promoted and access to a range of financial products and services expanded	<p>Financial services</p> <ol style="list-style-type: none"> 1. % of HHs currently saving money in a formal financial institution 2. % of HHs that joined a RuSACCO after participating in GRAD 3. % of HHs getting first time access to MFI credit after joining GRAD 4. Average amount saved per HH (in VESA, RuSACCO, MFI, Other, and Total) last year 5. Average current savings balance (in VESA, RuSACCO, MFI, Other, and Total) 6. % of HHs that created a business plan with which to seek a loan 7. % of HHs that have received at least one loan from VESA for IGA 8. % of HHs that have received at least one loan from an MFI, RuSACCO or Union 9. % of HHs that have received more than one loan from an MFI, RuSACCO or Union 10. Total value of loans received over the LOP from all sources. 11. % of HHs repaying a loan from an MFI, RuSACCO, Union on schedule 12. % of HHs that have received and fully repaid a loan from an MFI, RuSACCO, Union (for mature loans only) 13. % of HHs who have not repaid loans on time for any reason. Reasons for non-payment: a) failure or low returns from VC activity; b) other HH priorities; c) not necessary to repay; d) other. 14. Proportion of loans that were used for the purpose as stated in the business plan, i.e. the selected VC, and for what purposes has it been used if not the intended purpose
IR 1.3: Extension services upgraded	<p>Access to agricultural services</p> <ol style="list-style-type: none"> 1. % of HH that received technical assistance and/or extension services for their value chain activities. 2. Source of extension services received by HH 3. Perception on the quality of the services, by source

Result Two: Improved Household and Community Resilience

	Refined Indicators
IR 2.1: Women's resilience and access to inputs, services and	<ol style="list-style-type: none"> 1. % of women who make decisions themselves over the utilization of the income they earn 2. % of women who make decisions themselves or jointly with spouse or other HH male over large household expenditures

<p>information increased</p>	<ul style="list-style-type: none"> a. Buying agricultural inputs, b. paying household necessities/utilities, c. Personal expenses, d. Buying food items for HH consumption, e. Other <ol style="list-style-type: none"> 3. % of women who make decisions themselves or jointly with spouse or other HH male on sale of livestock 4. % of women accessing agricultural inputs (seeds and fertilizer) 5. % of women accessing services (market information, formal finance, technical support); 6. % of women accessing output market to sell agricultural products 7. % of women and men reporting increased equity in division of labor within the HH (i.e. sharing HH chores with husband) (data should be collected and analyzed separately) 8. % of women serving in a leadership position in their VESA during the past year. 9. % of women reporting increased time for rest, social, and/or leisure activities during the past year 10. % of women reporting that husbands care for children while they attend meetings, participate in IGAs, go to market, etc. 11. % of women who are assigning similar household tasks to daughters and sons. 12. % of women and men who report positive changes in their relationship, as indicated by: <ul style="list-style-type: none"> ✓ Men are respecting women’s idea to solve conflicts at household levels. ✓ Husbands are showing smiling faces to their wives and greet them ✓ Husbands are sitting and eating with their wives 13. % of women and men who report positive changes for GBV and HTPs: <ul style="list-style-type: none"> ✓ Physical or verbal abuse of women by men. ✓ FGM ✓ Early marriage
<p>IR 2.2: Nutritional status of infants, children and reproductive age women improved</p>	<ol style="list-style-type: none"> 1. % of HHs practicing Exclusive Breast Feeding (EBF) for children under 6 months 2. % of children born in the last 24 months who were ever breastfed. 3. % of children born in the last 24 months who were put to the breast within one hour of birth. 4. % of infants 6–8 months who receive solid, semi-solid, or soft foods. 5. % of HHs with Women dietary diversity (WDD) 6. % of HHs providing Minimum Dietary Diversity for children (6-23months) 7. % of HHs providing Minimum Meal Frequency for children 8. % of HHs practicing Minimum Acceptable Diet (MAD) 9. % of HHs with both new/expanded traditional home gardens 10. % of HHs with both new/expanded traditional poultry productions for nutrition & income 11. % of HHs with improved home gardens applying a technology promoted by GRAD 12. % of HHs with improved poultry production applying a technology promoted by GRAD

	<p>13. % of households who were trained and are producing OFSP</p> <p>14. % HHs consuming OFSP at least once per month</p> <p>15. % of households with proper hand washing practices</p> <p>16. % of women aged 15 to 49 years that took folate/iron supplements during their last 24 month pregnancy or current pregnancy</p>
IR 2.3: Climate change adaptation improved	<p>1. % of target beneficiaries who perceive the impact of climate change induced hazards</p> <p>a) Perception of change in rainfall amount and variability over time</p> <p>b) Perception of increase in temperature over time</p> <p>c) Perception of increase in the occurrence of animal and plant diseases over time</p> <p>d) Perception of increase in the frequency/severity of floods</p> <p>e) Other changes</p> <p>2. % of HHs who employ any of the following measures to adapt to climate change</p> <p>a. Use of short-season or drought resistant crops or varieties.</p> <p>b. Practice moisture conserving practices, mulching.</p> <p>c. Diversify into less risky livelihoods activities.</p> <p>d. Subscribe to weather index insurance</p> <p>e. Start using supplemental irrigation</p> <p>f. Adopt use of fuel efficient stoves</p> <p>g. Watershed improvements (e.g. planting trees and forage crops; erosion control structures, etc.)</p> <p>h. Start savings or increase savings rates.</p> <p>i. Use of improved feed technologies (concentrate feed, planting forage plants, etc.) to avoid free range grazing</p>
Supplemental indicators related to drought and recovery	<p>1. % of HHs experiencing a severe shock in the past 12 months (by type)</p> <p>2. % of HH impact, by type (crop failure, livestock death or distress sale, loss of other significant asset, reduction in food consumption, reduction in quality of food consumed, distress out-migration, children removed from school, default on loan repayment, other).</p> <p>3. % of those HHs that received support for livelihood recovery (by source, including GRAD).</p> <p>4. % of HH that feel that the support received will lead to: a) complete; b) moderate; c) slight; or d) no recovery of livelihoods to pre-shock condition.</p>
IR 2.4: Promote aspirations for graduation among targeted PSNP HHs and enhance enablers of graduation	<p>5. % of HHs no longer in PSNP</p> <p>6. % of HHs that graduated from the PSNP during the past year</p> <p>7. % of HHs that graduated from the PSNP during GRAD</p> <p>8. % of HHs who aspire to graduate in: a) < 1 year; b) 1-2 years; c) 3-5 years); d) never.</p>

Appendix C: Household Questionnaire



GRAD 2016 IR Assessment – Household Questionnaire

101: Region	102: Zone	103: Woreda	104: Kebele	105: IP Code	106: HH No.	107: GPS UNIT (UTM reading)										108: Enumer Code	109: Super Code
						WP	ELEV	Easting					Northing				



112: HH Serial Number _____

113: Date of survey dd/mm/year _____

114. Implementing partner:

1. CARE 2. CRS/MCS 3. REST 4. ORDA 5. ASE

115. Name of HH head [**Respondent 1**] _____

116. Sex of HH head [**Respondent 1**] 1 = Female 2 = Male

117. Name of **respondent 2** _____ [Not applicable for FHH]

118. Sex of HH **respondent 2** _____ 1 = Female 2 = Male

INFORMED CONSENT

Enumerator: For FHH, the HH head is the respondent. For MHH, both husband and wife will be respondents.

about implementation of
participate in an interview that
and women. The survey

includes questions about the household generally, and questions about individuals within your household, if applicable. These questions in total will take approximately **50 minutes** and your participation is entirely voluntarily. If you agree to participate, you can choose to stop at any time or to skip any questions you do not want to answer. Your answers will be completely confidential. We will not share information that identifies you with anyone.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey and the interview, or concerns or complaints we welcome you to contact Green Professional Services and/or CARE Ethiopia.

1. 2. 3. Name	5. Consent to participate in survey (Check one box)		Name of Enumerator 6.	Date 7.
	8. 9. YE	10. 11. NO		

Interview status to be completed by Supervisors

Interview Status		Check for Relevant
1	Completed	
2	HH present, no adult respondent available	
3	HH absent	
4	Postponed	
5	Refused	
6	Dwelling vacant	
7	Dwelling destroyed	
8	Dwelling not found	
9	Other	

Interview status comments:

	The quality of this completed questionnaire is:
<input type="checkbox"/>	Poor

<input type="checkbox"/>	Average
<input type="checkbox"/>	Excellent
Did you back check this survey? 1. Yes 2. No	

“I certify that this questionnaire has been collected in accordance with the survey design and GRAD IR Assessment survey guidance.”

Survey Supervisor Name (please print): _____

Survey Supervisor Signature: _____

Date of Verification: _____

Module 2–Household Demographics

201	202	203	204
Household Member Name	Age in completed years	Sex1=Male2=Female	Relation to household head Enter codes from list
01			
02			
03			
04			
05			
06			
07			

203. Total household size _____

Household Identification Code sheet

	Region		Implementing Partner	Relationship Type
01	Tigray		01 CARE Ethiopia	
02	Amhara		02 CRS/MCS	Head
03	Oromia		03 REST	Spouse
04	SNNPR		04 ORDA	Son/daughter of head and spouse

	Relationship Type			05	ASE	Son /daughter of head
01	Head	08	Foster child			Son/daughter of spouse
02	Spouse	09	God child			Mother/father of head/ spouse
03	Son/daughter of head and spouse	10	Grand child	01		Sister/brother of head/spouse
04	Son /daughter of head	11	Other relatives	02		Relationship Type
05	Son/daughter of spouse	12	Non-relatives	03		

Module 3 - Economic Opportunities, Value Chains and Market Access

Income

NEW IGA ENGAGEMENT

code	IGA	301a: Has your household adopted any of the following IGAs since the start of GRAD (enumerator: choose all mentioned and then prompt by reading from list) Yes = 1 No=2	301b:Has your household adopted any of the following IGAs during this year (enumerator: choose all mentioned and then prompt by reading from list) Yes = 1 No=2	302.a Total value of Product sales this year (last 12 months) (<i>Not Applicable = 99</i>)	302: b Net annual income in Birr during <u>the last 12 months</u> from this new IGA [<u>total income minus inputs costs</u>] (<i>Not Applicable = 99</i>)	302c: Total value of Product sales a year before 12 months (<i>Not Applicable = 99</i>)
3a1	Petty trade (including of grain)					
3a2	Backyard vegetable production and sales					
3a3	Poultry production and sales					
3a4	Other livestock, including rearing (Non-VC)					
3a5	Retail (including salons, restaurants, beverage, micro-franchise)					
3a6	Donkey/horse cart					
3a7	Trade (carpentry, etc) or handicrafts					

3a8	Other					
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VC ENGAGEMENT [Specified for IPs in ODK]

code	VC	303: Has your HH engaged in any of the following VC products since the start of GRAD? (enumerator: choose all mentioned and prompt by reading from list) Yes=1, No=2, if no skip to next section	305: What was the source of finance for the VC engagement? MFI = 1, Union = 2, RuSACCO = 3, VESA= 4, Self=5, other = 6, <i>Not Applicable = 99</i>	304: Has your household engaged in selling any of the following VC products last year Yes = 1, No=2	306a.If yes, total value of Product sales last year (<i>Not Applicable = 99</i>)	306:Has your HH engaged in any of the following VC products this year (enumerator: choose all mentioned and prompt by reading from list) Yes=1, No=2, if no skip to next section
3b1	Cattle fattening					
3b2	Shoat Fattening					
3b3	Cereal-Malt barley					
3b4	Honey					
3b5	Pulse- Faba beans (Bakela)					
3b6	Pulse-White pea beans (white – bologq)					
3b7	Pulse-Red Bean (red – bologq)					
3b8	Vegetable-Red pepper					
3b9	Vegetable-Onion					
3b10	Vegetable-Tomato					
3b11	Vegetable-Potato					

INCOME FROM VC ENGAGEMENT

code	VC	307: Number of production Unit during the last 12 months (Animals, hectares of land, beehives)	310: Total cost of purchased input costs in Birr related to the specific VC product, <u>during the last 12 months</u>	309: Total value of product sales in birr <u>during the last 12 months</u>	311: Has your household completed more than one round/ cycle of a new / strengthened value chain since joining GRAD? 1= Yes; 2= No.
3b1	Cattle fattening				
3b2	Shoat Fattening				

3b3	Cereal-Malt barley				
3b4	Honey				
3b5	Pulse- Faba beans (Bakela)				
3b6	Pulse-White pea beans (white-boloqa)				
3b7	Pulse-Red Bean (red – boloqa)				
3b8	Vegetable-red pepper				
3b9	Vegetable-Onion				
3b10	Vegetable-Tomato				
3b11	Vegetable-Potato				

Module 4 – Access to Market, Agricultural Inputs, Financial Services and Extension Services

4.1 ACCESS TO MARKET

401	Are you a member of a farmers' economic and marketing association (FEMA)?	1= Yes; 2= No
402	Are you a member of any farmers cooperative?	1= Yes; 2= No
403	Does your household sell its produce through FEMAs?	1= Yes; 2= No
404	Does your household sell its produce through farmers' cooperatives?	1= Yes; 2= No
405	Does your household sell its produce through other aggregators?	1= Yes; 2= No
406	Howmany times have you sold your produce through FEMAs during the year?	_____
407	How many times have you sold your produce through farmers' cooperatives during the year?	_____
408	How many times have you sold your produce through other aggregators like traders and processors during the year?	_____
409	Do you believe that the price you got for your produce when you sold it through FEMAs was fair?	1= Always; 2= Most of the times; 3= Rarely; 4=Never
410	Do you believe that the price you got for your produce when you sold it through farmers' cooperatives was fair?	1= Always; 2= Most of the times; 3= Rarely; 4=Never
411	Do you believe that the price you got for your produce when you sold it through other aggregators was fair?	1= Always; 2= Most of the times; 3= Rarely; 4=Never
412	Have you obtained market information before taking your product to market since your involvement in GRAD?	1= Yes; 2=No, If no, skip to next section
413	From whom do you obtain market information?	1=Development Agent; 2= NGO; 3= Mass

	media; 4= Model farmers, 5 = Others
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4.2 ACCESS TO AGRICULTURAL INPUTS

Enumerator: Ask if HH has used any of the inputs/technologies. If yes, ask the follow-on questions.

4.2.1 Livestock

Input/technology	4.2.1 .aHH Use 1= Yes; 2= No	4.2.1.b From where do you obtain these agricultural input/tech./service 1= Farmers cooperative; 2= Agri. Office; 3=GRAD agro-dealer; 4= Other private sector; 5= Model farmer 6= self (own) 7= Other	4.2.1 .cHow do you perceive the <u>affordability</u> of these inputs? 1= Very affordable 2= Moderately affordable 3= Slightly affordable 4= Not affordable 99= not applicable	4.2.1 .dHow do you perceive the <u>quality</u> of these inputs? 1= High quality 2= Moderate quality 3= Poor quality
1. Effective Micro-organism /EM/Chemical				
2. Manual Chopper				
3. UMB [Urea Molasses Block]/ Molasses				
4. Silage making				
5. Concentrate and industrial by-product feed				
6. Urea treatment				
7. Cut and carry system				
8. Planting improved forages				
9. Bokash				
10. Mineral				
11. Livestock drugs				

4.2.2 Honey

Input/technology/Service	4.2.2 .aHH Use 1= Yes; 2= No	4.2.2 .b From where do you obtain these agricultural	4.2.2 .c How do you perceive the <u>affordability</u> of these inputs?	4.2.2 .d How do you perceive the <u>quality</u> of these
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		inputs/ technologies /services 1= Cooperative; 2= Agriculture office; 3=GRAD agro-dealer; 4= Other private sector; 5= Model beekeeper/technician 6= self(own) 7: Other	1= Very affordable 2= Moderately affordable 3= Slightly affordable 4= Not affordable 99 = not applicable	inputs? 1= High quality 2= Moderate quality 3= Poor quality
1. Colony multiplication at HHs level				
2. low cost transitional hives				
3. modern bee hives				
4. Honey harvesting				
5. Shade/stand construction				
6. Bee colony transfer				

4.2.3 Vegetables and Pulses

	4.2.3 .a HH Use 1= Yes; 2= No	4.2.3 .b From where do you obtain these agricultural inputs/tech./service 1= Cooperative; 2= Agri. Bureau; 3=GRAD agro-dealer; 4= Other private sector; 5= Model farmer 6= Other	4.2.3 .c How do you perceive the <u>affordability</u> of these inputs? 1= Very affordable 2= Moderately affordable 3= Slightly affordable 4= Not affordable 99 = not applicable	4.2.3 .d How do you perceive the <u>quality</u> of these inputs? 1= High quality 2= Moderate quality 3= Poor quality
Red Pepper				
1. Organic fertilizer application				
2. Row planting				
3. Selection and use of good quality seeds				
4. Post harvest handling (drying system)				
5. Agricultural tools/ Rope and washer pump				
6. Agro chemicals				

Onion				
1. Supplemental irrigation				
2. Improved seed Varieties				
3. Row planting				
4. Improved irrigation				
5. Furrow irrigation				
6. Fertilizer application				
7. Agricultural tools / Rope and +washer				
8. Agro chemicals				
Tomato				
1. Supplemental irrigation				
2. Improved seed Varieties				
3. Row planting				
4. Improved irrigation				
5. Furrow irrigation				
6. Fertilizer application				
7. Agricultural tools/ Rope and +washer				
8. Agro chemicals				
Malt Barely				
1. Improved seeds				
2. Row planting				
3. Fertilizer application				
4. Agro chemicals				
Potato:				
1. Improved seed				
2. Fertilizer application				
3. Supplemental irrigation				
4. Row planting				
5. DLS (Diffused Light Storage)				
6. Agricultural tools/ Rope and +washer				
7. Agro chemicals				
Pulses				
1. Super Grain Bags				

2. Improved seeds				
3. Fertilizer application				
4. Agro chemicals				

ACCESS TO FINANCIAL SERVICES

	Institution	444: Membership Yes = 1 No = 2	444.a Who is a member? 1 = Husband 2 = Wife 3 = Both 4=Other (specify)	445: Amount of total saving last year?	446: Amount of current balance:	448: Taken loan since joining GRAD? Yes = 1 No = 2 If No, skip to next section	449: Number of times loan taken. (Number) (If loan not taken, put 99)	450: Total amount of loans taken so far. (Amount in Birr)	447: Business plan prepared to take the recent loan? Yes = 1 No = 2	451: When taken loan, what % of the loan has been used as per business plan? 1 = The entire amount 2= Most of it 3= 50/50 4= Less of it 5= None of it 99 = not applicable	452: Is borrower repaying loan on schedule? Yes = 1 No = 2	453: Has borrower managed to pay in full all matured loans? Yes = 1 No = 2 99 = not applicable
4a1	VESA											
4a2	Cooperative Union											
4a3	RuSACCO											
4a4	MFI											
4a5	Bank											

444. b If you are a member of a RuSACCO, did you join it after participating in GRAD?

1 = Yes 2 = No

444.c If you have obtained credit from MFI after joining GRAD, was that your first time to access loan?

1 = Yes 2 = No

AGRICULTURAL SERVICES

	454. HH received technical assistance and/or extension services for its value chain activities in the last year from this source> 1 = Yes 2 = No	455. If yes, how often? 1= Once in two weeks; 2= once in a month; 3= Once in a two months; 4= once in a quarter 5= (Other) specify _____	456. How do you perceive the quality of the extension service from this provider? 1= High quality 2= Moderate quality 3= Poor quality
1. Development Agent			

(DA)			
2. Model Farmer			
3. Agro-Dealer			
4. GRAD frontline staff			
5. Animators/facilitators			

457	Did you receive any training on value chain you are participating?	1= Yes; 2= No
458	If yes, what was the content of the training? (Multiple response is possible)	1 = Production(use of technologies and practices) 2 = marketing 3 = post-harvest handling 4= Other (specify)
459	In total in the past 12 months, How many days did the training/s you participated took?	_____
460	Did you attend field days and group discussions conducted on model farmers plot during the year?	1= Yes; 2= No

Module 5 – Women’s Resilience

5.1 Women’s Perception (Administer module 5.1to Women [the wife in MHH OR the head in FHH])

506	Would you say the amount of time you have for rest, social, and/or leisure activities has increased, decreased or remained the same during the past year?	1= Increased; 2= Remained Same; 3= Decreased
507	Do you assign similar HH tasks to daughters and sons?	1= Yes, 2=No, 99=not applicable
508	Do you have access to different production inputs? (like fertilizer, pesticide, improved seeds, and other agricultural technical support)	1= Yes, 2=No, 99=not applicable
511	Did you/do you serve in a leadership position in VESA?	1= Yes, 2=No, if No skip to next section (5.2) 99=not applicable
511a	If yes, what was/is your leadership position in VESA?	1= chairperson 2 = secretary 3 = cashier 4 = treasurer

5.2 Women’s and Men’s Perception [Ask both husband and wife in MHHs separately]

14. Women’s and men’s perception regarding decision making in the household.

1= Only men; **2=** women and men jointly; **3=** Only women; **4=** Female children; **6=** Male children 99 = not applicable

	In your household, who is the main decision maker on:	Wife	Husband
501	Utilization of the income the HH earned?		
502	Buying agricultural inputs?		
503	Paying household necessities/utilities?		
504	Spending money for personal expenses?		

505	Buying food items for household?		
506	Sale of livestock?		

15. Attitude regarding trend in relationship between men and women in the last three years. Rank as:

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree 99= applicable

To what extent do you agree or disagree with the following statements?	Wife	Husband
5.2.1.1 Men are respecting women's idea to solve conflicts at household levels		
5.2.1.2 Husbands are showing smiling faces to their wives and greet them		
5.2.1.3 Husbands are sitting and eating with their wives		
5.2.1.4 Husbands share HH chores with their wives		
5.2.1.5 Husbands care for children while wives are away on other engagements		

16. How would you say the following have changed over the past three years?

1 = Increased; 2 = Remained the Same; 3= Decreased

	Wife	Husband
5.2.2.1 Physical or verbal abuse of women by men		
5.2.2.2 FGM		
5.2.2.3 Early marriage		

Module 6- Nutrition and WASH

EARLY INITIATION OF BREAST FEEDING

Note: The next set of questions should be asked of the mother with regard to all her children aged 0– 24 months old

Child Registration Form

Ask if child under age of 24 months live in the household and complete below registration

		Name of Child	Age of Child in months
6c1	Child one		
6c2	Child Two		
6c3	Child Three		

If there are children under age of 24 months, ask below question for each child

		6c1: Child one	6c2 : Child Two	6c3: Child Three
601	Did you feed this child with colostrum?	1 = Yes 2= No 99= DK	1 = Yes 2= No 99= DK	1 = Yes 2= No 99= DK
602	Have you ever breastfed [NAME OF CHILD]?	1= YES2= No -----→Q604	1= YES2= No -----→Q604	1= YES2= No -----→Q604

603	If the answer to Q602 is YES , how long after birth did you first put [NAME OF CHILD] to the breast?	1= less than one hour, 2= Greater than 1 hour and less than 24 hour 3 = Greater than 24 hours/1 Day	1= less than one hour, 2= Greater than 1 hour and less than 24 hour 3 = Greater than 24 hours/1 Day	1= less than one hour, 2= Greater than 1 hour and less than 24 hour 3 = Greater than 24 hours/1 Day
604	Has [NAME OF CHILD] ever taken anything other than breast milk?	1= YES 2= No ----- If no, skip to 606	1= YES 2= No ----- →Q606	1= YES 2= No ----- →Q606
605	If YES , at what age (months) did you first give [NAME OF CHILD] food OR drink (even water) other than breast milk?	__ __ months	__ __ months	__ __ months

EXCLUSIVE BREAST FEEDING (EBF)

Note: Consider Infants 0–5 months¹⁷ of age and inform the mother that you would like to ask about breastfeeding and others since this time yesterday
(If answer to Q602 above is Yes, for children of under 6month, fill in below questions)

		6c1: Child one		6c2 : Child Two	
606	Was the child breastfed since this time yesterday?	1 = Yes 2= No	99= DK	1 = Yes 2= No	99= DK
607	Did the child consume breast milk in any of these ways (breastfed by other woman or milk from other woman given by spoon or bottle) since this time yesterday?	1 = Yes 2= No	99= DK	1 = Yes 2= No	99= DK
608	Did the child consume any other liquids (except ORS, drops, syrups-vitamins, minerals and medicines) since this time yesterday?	1 = Yes 2= No	99= DK	1 = Yes 2= No	99= DK

MEAL FREQUENCY

Note: Consider children 6–23 months of age and inform the mother that you would like to ask about what the child has received since this time yesterday

¹⁷ 5 months means 5 completed months and 29 days

		6c1: Child one	6c2 : Child Two	6c3: Child Three
609a	Was the child breastfed since this time yesterday?	1 = Yes 2= No 99= DK	1 = Yes 2= No 99= DK	1 = Yes 2= No 99= DK
609b	Since this time yesterday, how many times was [NAME OF CHILD] fed mashed or pureed food or solid or semi-solid food? <i>Note: doesn't include drink!</i>	__ __ times	__ __ times	__ __ times

CHILDREN DIETARY DIVERSITY

610: Have Child (name) in your household born aged 6-24 months eaten any of the following foods yesterday from waking up in the morning to going to sleep at night?

		6c1: Child one	6c2 : Child Two	6c3: Child Three
6a1	Injera, Porridge, bread, rice, noodles, or other foods made from grains	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a2	White potatoes, white yams, manioc, cassava, or any other foods made from roots	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a3	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a4	Any dark green leafy vegetables	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a5	Ripe mangoes, ripe papayas or (Insert other local vitamin A-rich fruits)	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a6	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a7	Any other fruits or vegetables	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a8	Liver, kidney, heart or other organ meats	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a9	Any meat, such as beef, lamb, goat, chicken, or duck	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a10	Fresh or dried fish	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a11	Eggs	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a12	Any foods made from beans, peas, lentils, nuts, or seeds	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a13	Cheese, yogurt, or other milk products	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a14	Any oil, fats, or butter, or foods made with any of these	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable
6a15	Any sugary foods such as chocolates, sweets,	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable

	candies, pastries, cakes, or biscuits			
6a16	Condiments for flavor, such as chilies, spices, herbs or fish powder	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable	1= Yes, 2=No, 99=not applicable

6.3 WOMEN DIETARY DIVERSITY

611: Have women in your household eaten any of the following foods on the day before **(the closest non-fasting day before)** the interview day from waking up in the morning to going to sleep at night?

6a1	Porridge, bread, rice, noodles, or other foods made from grains	1= Yes, 2=No, 99=not applicable
6a2	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside	1= Yes, 2=No, 99=not applicable
6a3	White potatoes, white yams, manioc, cassava, or any other foods made from roots	1= Yes, 2=No, 99=not applicable
6a4	Ripe mangoes, ripe papayas or (Insert other local vitamin A-rich fruits)	1= Yes, 2=No, 99=not applicable
6a5	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce	1= Yes, 2=No, 99=not applicable
6a6	Any dark green leafy vegetables	1= Yes, 2=No, 99=not applicable
6a7	Any other fruits or vegetables	1= Yes, 2=No, 99=not applicable
6a8	Liver, kidney, heart or other organ meats	1= Yes, 2=No, 99=not applicable
6a9	Any meat, such as beef, lamb, goat, chicken, or duck	1= Yes, 2=No, 99=not applicable
6a10	Fresh or dried fish, shellfish, or seafood	1= Yes, 2=No, 99=not applicable
6a11	Eggs	1= Yes, 2=No, 99=not applicable
6a12	Any foods made from beans, peas, lentils, nuts, or seeds	1= Yes, 2=No, 99=not applicable
6a13	Cheese, yogurt, or other milk products	1= Yes, 2=No, 99=not applicable
6a14	Any oil, fats, or butter, or foods made with any of these	1= Yes, 2=No, 99=not applicable
6a15	Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits	1= Yes, 2=No, 99=not applicable
6a16	Condiments for flavor, such as chilies, spices, herbs or fish powder	1= Yes, 2=No, 99=not applicable

PREGNANT WOMEN IRON SUPPLEMENT INTAKE [| Ask only the Wife]

612. Are you currently pregnant or were you pregnant in the last two years? 1 = Yes 2 = No [skip to 616]

613. If yes, have did you take/folate / iron supplements during the latest pregnancy? (Please demonstrate the tablet)

1 = Yes 2 = No

HOME GARDEN PRACTICES

616	Do you practice traditional home gardens (raised bed or simply on flat ground at backyards), new or expanded to grow vegetables due to support of GRAD?	1= Yes, 2=No, 99=not applicable; If No, skip to 619
617	For what purpose do you use the produce?	1= Income generating; 2 = HH consumption; 3= Both
618	What kind of input support did you obtain?	1= Garden demonstration training; 2 = Seed support; 3 = both; 4 = No support received
619	Do you practice perma-gardens or keyhole gardens (special raised beds with efforts made to make the soil fertile and conserve water) new or expanded to grow vegetables due to support of GRAD?	1= Yes, 2=No, 99=not applicable; If No, skip to 622
620	For what purpose do you use the produce?	1= Income generating; 2 = HH consumption; 3= Both
622/621	What kind of input support did you obtain?	1= perma/key hole-garden demonstration training; 2 = Seed support; 3 = both; 4 = No support received
622	Have you ever used OFSP for household consumption?	1= Yes, 2=No,
623	Did you get any education/training on OFSP production and utilization?	1= Yes, 2=No
624	Have you planted OFSP at your back yard garden?	1= Yes, 2=No

POULTRY

625	Do you practice traditional poultry (new or expanded) due to support/promotion of GRAD?	1= Yes, 2=No, 99=not applicable; If No, skip to 628
626	For what purpose do you use the produce?	1= Income generating; 2 = HH consumption; 3= Both
627	What kind of input support did you obtain?	1= Training; 2 = Support to purchase chickens (through loan access from VESA or MFI); 3 = both; = 4= Other
628	Do you practice Improved poultry production, where chickens are kept in a pen?	1= Yes, 2=No, 99=not applicable; If no, skip to next section (Q637)
629	For what purpose do you use the produce?	1= Income generating; 2 = HH consumption; 3= Both
630	What kind of input support did you obtain?	1= Training on modern poultry production 2 = Support to purchase improved/local chicken through loan access from VESA or MFI; 3 = both; 4= Other

HAND WASHING PRACTICES

637. Can you name key/critical times for hand washing? (Do not read the answer. One or more answer is possible) [ask the FHH or the wife in MHHs]

		1 = Yes, No = 2
6b1	Before eating	
6b2	After using toilet	
6b3	Before preparing food	
6b4	Before feeding child	
6b5	After eating	

6b6	After cleaning a child who has defecated	
6b7	After cleaning a toilet?	
6b8	When dirt is visible	
6b9	When I am reminded to do so	
6b10	Not at all	
6b11	Other	

638. What do you usually wash your hands with? **(Do not read the answer).**

1 = Water only 2 = Ash& water 3= Soil & water 4 =Leaves& water 5= Soap &water 6= Other

Module 7 - Climate Change Adaptation

701	Do you think that climate change is occurring in your locality?	1= Yes, 2= No; if no, skip to next...
702	If yes, in what manner has it occurred in your locality? [Enumerator: let the respondent list and then check]. (Multiple response is possible)	1= Change in rainfall amount; 2 = Variability in rainfall; 3= Increase in temperature; 4= increase in the occurrence of animal and plant diseases; 5=increase in the occurrence of floods; 6 = Other (specify)

		703: Which of the following Climate Change Adaptation do you currently practice?	704: Did you adopt this as a result of GRAD
7a1	Use short-season or drought resistant crops or varieties.	1= Yes, 2= No	1= Yes, 2= No
7a2	Diversify into less risky livelihoods activities.	1= Yes, 2= No	1= Yes, 2= No
7a3	Subscribe to weather index insurance [Only REST and ORDA]	1= Yes, 2= No	1= Yes, 2= No
7a4	Start using supplemental irrigation	1= Yes, 2= No	1= Yes, 2= No
7a5	Adopt use of fuel efficient stoves	1= Yes, 2= No	1= Yes, 2= No
7a6	Watershed improvements (e.g. planting trees and forage crops; erosion control structures,)	1= Yes, 2= No	1= Yes, 2= No
7a7	Start savings or increase savings rates.	1= Yes, 2= No	1= Yes, 2= No
7a8	Use improved feed technologies (planting forage plants, fast growing grasses etc)	1= Yes, 2= No	1= Yes, 2= No

Module 8 – Drought and Recovery

8.1 Has your household experienced weather/ economic shock in the past 12 months?

1 = Yes 2 = No [skip section to module 9]

8.2 Which shock has HH faced?

Climatic shocks	1 = Yes 2= No
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1. Excessive rains	
2. Too little rain/drought	
3. Frost/freezing rain/hail	
4. Livestock/crop disease	
5. Flood	
6. Landslides/avalanches/erosion	
Economic shocks	
7. Extreme increase in food prices	
8. Crop failure	
9. Livestock death	
10. Loss of other significant asset	
11. Loss of family members	
12. Other (specify)	

8.2 Have you received support for livelihood recovery?

1 = Yes 2 = No [if no, skip to module 9]

Support	8.2.1 Have your received this support? 1 = Yes 2 = No	8.2.2 From whom did you mainly receive this support? 1= GRAD, 2= Government, 3= Other NGO/CSO, 5 = Friends, relatives, etc 6 = Religious organization 7=MFI/RUSACCO 8= Other
1. Aid in Cash		
2. Loan		
3. Food aid		
4. Emergency seed,		
5. Livestock feed		
6. Fodder seed		
7. Water tanker		
8. Other		

8.3 To what extent do you think your household would recover to from the shock pre-shock condition as a result of the support you received?
 1 = Completely 2= Moderately 3= Slightly 4 = Not at all

Module 9 - Aspiration to Graduate

901	Are you currently a PSNPHH?	1= Yes, 2=No If yes, skip to 905,
902	If no, when did you graduate from PSNP	1 = Before joining GRAD 2 = After joining GRAD , 3= Never been in PSNP
903	If you graduated after joining GRAD, would you think that you were ready to graduate at that time?	1= Yes, 2=No
904	Does your HH still need safety net support? [Enumerator, please explain HH will not be retargeted even if the answer is yes!]	1= Yes, 2=No
905	When do you aspire to Graduate from PSNP support?	1= In less than a year; 2= In the next two years; 3= In the next 3 to 5 years; 4= Never, 5= Don't know

Appendix D: Qualitative Checklist

Male FGD

1. Have households in your community begun to adopt IGAs as a result of GRAD?
 - a. Probe for common types of IGA
2. How profitable are these IGAs? Why?
3. Have households in your community begun to engage in VC activities as a result of GRAD?
 - a. Probe for common type and source of financing
4. How profitable are these VCs? Why?
5. What are the mediums households in your community sell their produce through?
 - a. Probe for frequency of sale, fairness of price
6. Are households in your community members of VESA, RuSACCO, or MFI?
 - a. Probe for predominant membership, frequency of saving
7. Do people in your community take loans from these institutions?
 - a. Probe for reasons, utilization, return
8. Has the status of women improved in your community since GRAD? In what manner.
9. What are main harmful traditional practices against girls and women in your community? How are the HTPs affecting girls and women? Have you observed changes in HTPs (particularly Female Genital Mutilation and early marriage) over the last three years?
10. The role of community leaders in fighting against Harmful Traditional Practice (Female Genital Mutilation and early marriage) being practiced on women and girls
11. Do you think there is climate change in your community? In what manner? What are you doing to adapt to it and/or mitigate its adverse impacts?
12. Do you think PSNP households aspire to graduate? What are the available enabling factors to graduation of HHs and be self sufficient? What measures do you see them taking to achieve this aspiration.

Female FGD

17. In general, how are decisions over major household affairs reached in your community?
18. How well do you rate women's access to agricultural inputs in your community?
 - a. Probe for challenges or enabling factors.
19. How well do you rate women's access to services inputs in your community?
 - a. Probe for challenges or enabling factors.
20. How well do you rate women's access to output market in your community?
 - a. Probe for challenges or enabling factors.
21. What does the division of labor in the household look like?
 - a. Has it changed since GRAD? In what direction?
22. What are main harmful traditional practices against girls and women in your community? How are the HTPs affecting girls and women? Have you observed changes in HTPs (particularly Female Genital Mutilation and early marriage) over the last three years? The role of community leaders in fighting against Harmful Traditional Practice (Female Genital Mutilation and early marriage) being practiced on women and girls
23. Please tell us breastfeeding practices in your community?
 - a. Probe for early breastfeeding as well as exclusive breast feeding.
24. What do you understand by dietary diversity?
 - a. For women

- b. For children
- 25. How do people in your community practice dietary diversity
 - a. For women,
 - b. For children
 - c. Probe for challenges or enabling factors.
- 26. How do you understand minimum meal frequency? How do people in your community practice it?

KII – Financial Institutions (VESA, RuSACCO, or MFI)

1. General information on institution
 - a. Membership requirements
 - b. Source of finance
 - c. Capital for VESA
2. What is the trend in membership in your institution since GRAD?
 - a. Probe for male and female membership
 - b. Probe for membership among HH in the PSNP
3. Tell us about saving practices.
 - a. Probe for regularity, amount, male or female, etc
4. Tell us about peoples/members loan taking practices
 - a. Major reasons/sectors/VCS/inputs
 - b. Preparation of business plan
 - c. Utilization as per business plan
5. What is the rate of repayment of loans?
 - a. Female and Male repayment practice
6. What are the major challenges and opportunities to providing financial services
7. Any success stories?